NOTICE OF A REGULAR MEETING
OF THE OLIVENHAIN MUNICIPAL WATER
DISTRICT'S FINANCE COMMITTEE
1966 Olivenhain Road, Encinitas, CA 92024
Tel: (760) 753-6466 • Fax: (760) 753-1578
VIA TELECONFERENCE ONLY

Pursuant to AB 3035, effective January 1, 2003, any person who requires a disability related modification or accommodation in order to participate in a public meeting shall make such a request in writing to the District for immediate consideration.

DATE: TUESDAY, FEBRUARY 2, 2021

TIME: 12:30 P.M.

PLACE: Remote Regular Meeting

Pursuant to the State of California Executive Order N-29-20, and in the interest of public health, OMWD is temporarily taking actions to mitigate the COVID-19 pandemic by holding Committee Meetings electronically or by teleconference. The Boardroom will not be open to the public for this meeting.

To join this meeting via phone, please dial:
(669) 900-9128 or (253) 215-8782
Meeting ID: 830 6449 0426 and Password: 516785

Note: Items On The Agenda May Be Taken Out Of Sequential Order As Their Priority Is Determined By The Committee

1. CALL TO ORDER
2. ROLL CALL (BOARD MEMBERS)
3. ADOPTION OF THE AGENDA
4. PUBLIC COMMENTS

5. CONSIDER APPROVAL OF THE MINUTES OF THE JANUARY 7, 2021 SPECIAL FINANCE COMMITTEE MEETING

6. CONSIDER PRESENTATION AND REPORT ON THE 2020 WASTEWATER COST OF SERVICE STUDY AND THE PROPOSED WASTEWATER (SEWER) REVENUE ADJUSTMENTS

7. QUARTERLY REVIEW OF INVESTMENTS AND FUND BALANCES (Q4 2020)

8. ADJOURNMENT

MINUTES OF A SPECIAL MEETING
OF THE FINANCE COMMITTEE
OF OLIVENHAIN MUNICIPAL WATER DISTRICT

January 07, 2021

A special meeting of the Finance Committee of Olivenhain Municipal Water District was held on Thursday, January 7, 2021, at the District office, 1966 Olivenhain Road, Encinitas, California via video conference.

President Sprague called the meeting to order at 10:06 a.m. In attendance via video conference were Edmund K. Sprague, Board President and Division 5 Director; Lawrence A. Watt, Treasurer and Division 2 Director; Kimberly Thorner, General Manager; Rainy Selamat, Finance Manager; Leo Mendez, Accounting Supervisor; and Jared Graffam, Financial Analyst. General Manager Thorner announced, per the Brown act, Christy Guerin, Division 3 Director, is also in attendance via video conference to audit the finance committee meeting, but will not participate.

Additionally, the following phone number called into the meeting: (858) 243-6374.

1. CALL TO ORDER

2. ROLL CALL (BOARD MEMBERS)

3. ADOPTION OF THE AGENDA

   Director Watt moved to adopt the agenda, seconded by Director Sprague and carried unanimously.

4. PUBLIC COMMENTS

   There were no public comments.

5. CONSIDER APPROVAL OF THE MINUTES OF THE NOVEMBER 16, 2020 REGULAR FINANCE COMMITTEE MEETING

   Director Watt moved to approve the November 16, 2020 meeting minutes, seconded by Director Sprague and carried unanimously.

6. REVIEW AND DISCUSS OMWD'S PROPOSED 2021 WATER RATES AND CHARGES

   Finance Manager Selamat presented Staff-proposed 2021 rate increases for potable and

recycled water services, and OMWD fire meter charges totaling a 2.6% revenue increase. Finance Manager Selamat noted the 2.6% revenue adjustment is below the original 5% increase planned for 2021 as part of the District's 2019 Cost of Service study.

Director Watt commented that the District was able to forgo an increase in rates for wastewater services this past year and asked why it's different for potable and recycled water services. General Manager Thorner responded that the District has more control over the expenses related to wastewater service. Potable and recycled water services are subject to pass-through increases for the cost of purchased water from other agencies of which the District has little control over.

Finance Manger Selemat reported the 2.6% revenue increase is primarily due to a 4.8% increase in untreated water wholesale pass-through costs from San Diego County Water Authority (SDCWA) effective January 1, 2021, a 15.8% increase in SDCWA infrastructure access charge, and a 1.98% inflationary pass-through based on the over-the-year SDCPI-U for 2020. General Manager Thorner added the District is only able to pass-through up to 9% of the 15.8% increase in the SDCWA infrastructure access charge per the District's Proposition 218 notice, so the District is absorbing approximately 6% of the increased costs.

Finance Manager Selamat stated the District was able to minimize rate increases in 2021 due to conservative financial planning, delaying non-critical water infrastructure projects to future years to reduce near-term capital expenses, pursued funding opportunities from state and federal programs for reimbursement of COVID-19 supply costs, and continued efforts to expand recycled water systems to be less dependent on SDCWA for water supply. Director Watt had questions on delayed projects and recycled water rate which were addressed by staff during the meeting.

Direct Sprague and Director Watt both stated they appreciate the District's effort to keep the rate increase low and agreed to bring the 2021 Staff-proposed rates for presentation to the full board for consideration at the January 13th board meeting. Actual approval of rate increases will not occur until the March 17th board meeting.

7. ADJOURNMENT

The meeting was adjourned at 10:47 a.m.

OLIVENHAIN
Municipal Water District

Agenda Item 6

Memo

Date:	February 2, 2021
To:	Finance Committee
From:	Rainy Selamat, Finance Manager
Via:	Kimberly Thorner, General Manager
Subject:	**CONSIDER PRESENTATION AND REPORT ON THE 2020 WASTEWATER COST OF SERVICE STUDY AND THE PROPOSED WASTEWATER (SEWER) REVENUE ADJUSTMENTS**

Sudhir Pardiwala with Raftelis Financial Consultants, Inc. will present his wastewater cost of service recommendations and revenue adjustments to the Committee for discussion and consideration.

A copy of Raftelis presentation and a copy of 2020 Wastewater Rate Study Report are included and attached for review.

Staff will also be available at the meeting.

Olivenhain
MUNICIPAL WATER DISTRICT

Wastewater Rate Study Report

January 8, 2021

RAFTELIS

OLIVENHAIN
Municipal Water District

RAFTELIS

January 8, 2021

Ms. Kimberly A. Thorner
General Manager
Olivenhain Municipal Water District
1966 Olivenhain Road
Encinitas, CA 92024

Subject: Wastewater Rate Study Report

Dear Ms. Thorner:

Raftelis is pleased to provide this 2020 Wastewater Rate Study Report (Report) to the Olivenhain Municipal Water District (District).
The major objectives of the study include the following:

- Develop a financial plan for the District Wastewater (WW) utility to ensure financial sufficiency, meet operation and maintenance (O&M) costs, and help ensure sufficient funding for capital refurbishment and replacement needs;
- Conduct a cost-of-service (COS) analysis;
- Develop fair and equitable 5-year WW rates which conform to Proposition 218 requirements based on the analysis and methodology set out in this Report

This Report summarizes our key findings and recommendations. It has been a pleasure working with you and we appreciate your help and the support provided by Ms. Rainy Selamat and Mr. Jared Graffam during the course of the study.

Sincerely,
RAFTELIS FINANCIAL CONSULTANTS, INC.

Sudhir Pardiwala, PE
Executive Vice President

Arisha Ashraf, PhD
Lead Consultant

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Abbreviations

Terms	Descriptions
4S	4S Ranch (Sanitation District)
4SWRF	4S Water Reclamation Facility
AF	Acre foot / Acre feet
AWWA	American Water Works Association
BOD	Biochemical oxygen demand
COS	Cost of Service
CIP	Capital Improvement Plan
EDU	Equivalent dwelling unit
FY	Fiscal Year ending (July 1 – June 30)
GPCD	Gallons per capita per day
GPM	Gallons per minute
HCF	Hundred cubic feet = 100 cubic feet = 748 gallons
Manual of Practice No. 27	Water Environment Federation's (WEF) Financing and Charges for Wastewater Systems (Manual of Practice No. 27)
MFR	Multi-family residential
MGD	Million gallons per day
O&M	Operations and maintenance
PAYGO	Literally "pay as you go" to refer to capital funded through rate revenues
RC	Rancho Cielo (Sanitation District)
R&R	Refurbishment and Replacement
SCADA	Supervisory control and data acquisition (system)
SFR	Single-family residential
SL	Santa Luz
TSS	Total suspended solids
WEF	Water Environment Federation
WW	Wastewater

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1. Executive Summary

1.1. Background of the Study

In June 2020, Olivenhain Municipal Water District (District) engaged Raftelis Financial Consultants (Raftelis) to conduct a Wastewater Rate Study (Study). The District last increased wastewater rates in July 2019. This Study included the preparation of a ten-year financial plan, cost of service analysis, and five-year implementation of wastewater rates.

This Report summarizes the key findings and recommendations of the Study. For purposes of the analysis set out in this Report, the terms "Rate(s)" and "Charge(s)" may be used interchangeably. Additionally, the terms "wastewater" and "sewer" may be used interchangeably.

The District's Wastewater System is an interconnected system comprised of two sub-districts with a wide variety of commercial, industrial, and residential uses:

- Rancho Cielo Sanitation District – This includes the Rancho Cielo Estates development and adjacent areas. It is located just east of the covenant area of Rancho Santa Fe and north of Del Dios Highway. The District provides sewer service to approximately 310 single family homes in the Cielo Sanitation District.

- 4S Ranch Sanitation District – This area consists of the 4S Ranch master planned community and other minor surrounding areas in the City of San Diego. It is located just west of Rancho Bernardo. The District provides sewer service to approximately 3,680 single family homes in the 4S Ranch Sanitation District and 1,540 multi-family and non-residential accounts. Santa Luz Housing Development and Black Mountain East Clusters were annexed to the 4S Ranch Sanitation District for sewer service only. Both are outside District boundaries.

The District's wastewater service area spans approximately 4,000 acres. Wastewater is collected through approximately 65 miles of gravity sewers and 13 miles of force mains, and ultimately pumped to the 4S Ranch Water Reclamation Facility (4SWRF). There are 14 sewer lift stations monitored by the District's supervisory control and data acquisition (SCADA) system.

The District is expecting to annex the Avion Development (also called Debevoise) in the near future. This development will consist of about 84 single family homes with their own collection system and discharge into the treatment plant through District mains. Since this annexation has not taken place the resultant impacts have not been factored into the rates.

1.2. Objectives of the Study

The major objectives of the study include the following:

- Develop financial plans for the Wastewater (WW) utility to ensure financial sufficiency, meet operation and maintenance (O&M) costs, ensure sufficient funding for capital replacement and refurbishment (R&R) needs, and provide for the financial health of the enterprises;
- Conduct a cost-of-service (COS) analysis;

- Develop fair and equitable 5-year WW rates which conform with Proposition 218 requirements based on the analysis and methodology set out in this Report.

1.3. Legal Requirements and Rate Setting Methodology

1.3.1. LEGAL REQUIREMENTS

In November 1996, California voters approved Proposition 218, which amended the California Constitution by adding Articles XIII C and Article XIII D. Article XIII D placed certain limitations on the use of revenue collected from property-related fees and charges and on the amount of the fee or charge that may be imposed on each parcel by governmental agencies. Additionally, it established procedural requirements for imposing new, or increasing existing, property-related fees and charges.

The substantive requirements in Article XIII D place limitations on (1) the use of the revenue collected from property-related fees and charges and (2) the allocation of costs recovered by such fees or charges to ensure that they are proportionate to the cost of providing the service(s) attributable to each parcel.

1.3.2. RATE SETTING METHODOLOGY

The wastewater rates were prepared using the principles established by the Water Environment Federation's (WEF) *Financing and Charges for Wastewater Systems* (Manual of Practice No. 27) which establishes commonly accepted professional standards for wastewater cost of service (COS) studies. The WEF Manual's general principles and the objectives of the Report are described below.

The first step in ratemaking is to determine the adequate funding of a utility. This is referred to as the "revenue requirement" analysis. This analysis considers the utility's short-term and long-term service requirements and objectives over a given planning horizon, including capital facilities and system operations and maintenance, to determine the adequacy of a utility's existing rates to recover its costs. A number of factors may affect these projections, including the number of customers served, water-use trends, nonrecurring sales, conservation, inflation, interest rates, capital finance needs, and other changes in operating and economic conditions.

After determining a utility's revenue requirement, the next step is a cost of service (COS) analysis. Utilizing a public agency's approved expense and revenue budgets and capital improvement plans, the rate analyst first functionalizes a utility's costs and assets among major operating functions (collection, treatment, etc.). After cost functionalization, the rate analyst allocates the "functionalized costs" to cost causation components. For wastewater these cost components include wastewater flow, strength, and general admin costs. Wastewater strength is further defined as the Biochemical Oxygen Demand (BOD) and Total Suspended Solid (TSS) loads contributed by each class. The analyst further distributes these cost causation components to each customer class (e.g., single-family residential, multi-family residential and commercial) by determining the loadings of flow and strength of each class.

Once the cost of service analysis is complete, the rate analyst designs rates to collect the cost to serve each customer class calculated as part of the cost of service analysis.

1.4. Wastewater Utility Financial Plan

Raftelis has projected the operating and capital expenses over the planning period and is recommending a revenue increase of two percent for FY 2022, starting July 1, 2021, followed by annual increases of three percent for the

next four years. The two percent increase is an increase in total revenue requirement from rates. The rate increases for different customer classes will be different based on the cost of service analysis.

The proposed financial plan is shown graphically in **Figure 1-1** with the columns representing the operating expense, debt, and capital expenses. The red line shows the revenues with no revenue adjustments and the green line shows the revenues with the proposed revenue adjustments. **Figure 1-2** shows graphically the financing plan for the capital improvement plan CIP). The large capital expenditure in FY 2022 is partially funded by a debt issue of $5 million.

Figure 1-1: Wastewater Utility Proposed Financial Plan

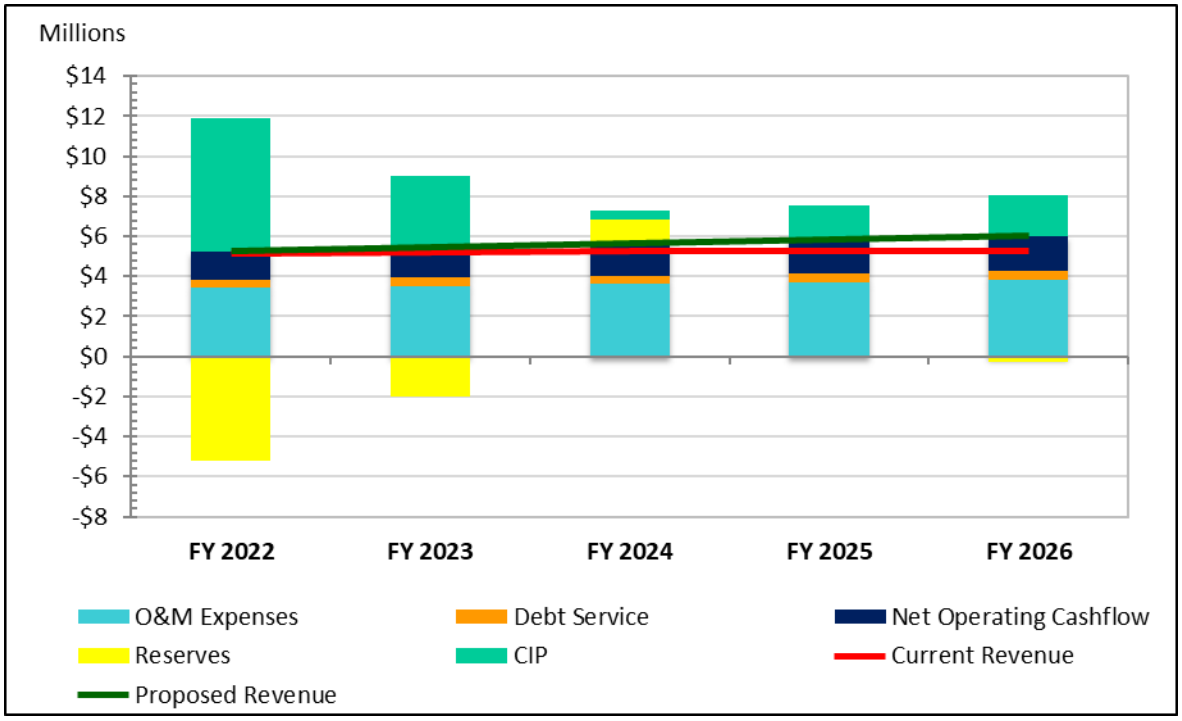
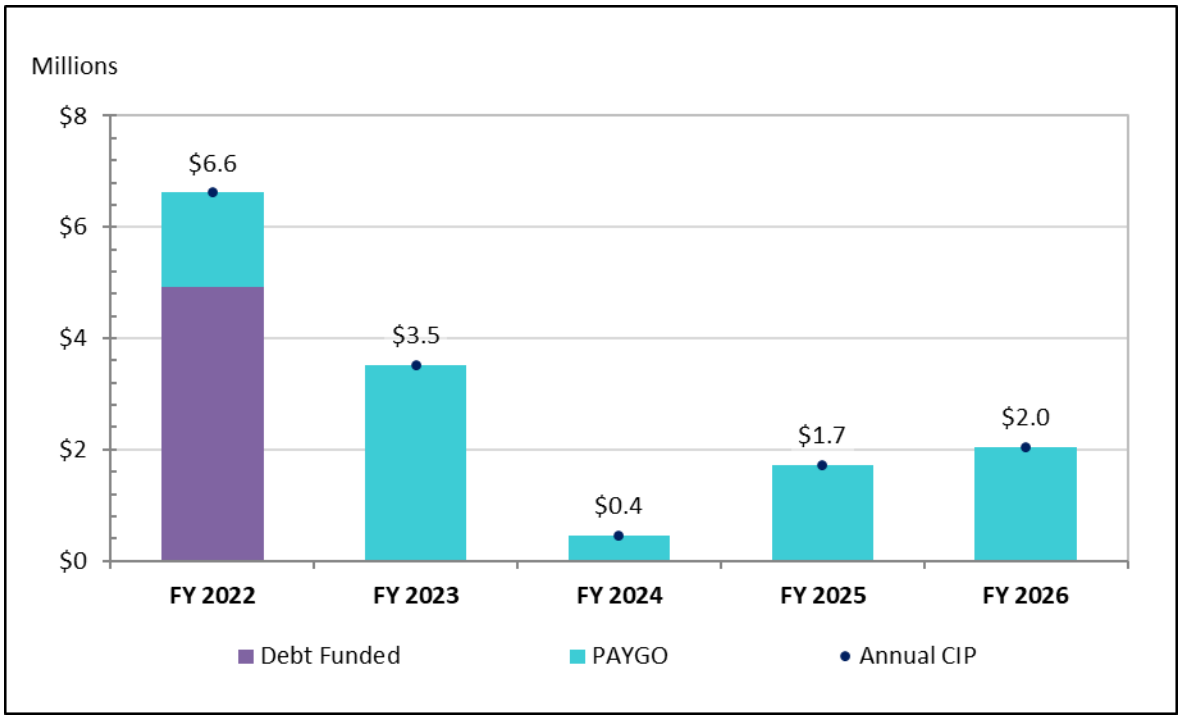


Figure 1-2: Capital Funding Sources



1.5. Proposed Wastewater Rates

The proposed rates across five years are presented for the annual system service charge in **Table 1-1** and the volumetric rate ($/hcf) in **Table 1-2**. One Multi-Family Residential (MFR) dwelling unit was revised to be equivalent to 0.79 EDU. This was estimated as the ratio of Single Family Residential (SFR) to MFR flow per EDU using FY 2020 billing data. The annual fixed charge for MFR customers is adjusted to 79 percent of the SFR fixed charge to account for their lower sewer flow.

$$FY\ 2022\ MFR\ Fixed\ Charge = \$186.17 \times 0.79^{1} = \$147.33$$

Table 1-1: Five-Year Proposed Annual Fixed Charges

Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
RC	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Other						
Multi-Family	$181.09	$147.33	$151.75	$156.31	$161.00	$165.83
Commercial - Group I	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Commercial - Group II	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56

[1] Note the exact value differs slightly due to rounding.

Table 1-2: Five-Year Proposed Volumetric Rates ($/hcf)

Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
RC	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Other						
Multi-Family	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group I	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group II	$10.16	$9.43	$9.72	$10.02	$10.33	$10.64

2. Assumptions

This section summarizes the principal assumptions in this Study. Unless otherwise stated herein, these assumptions are used consistently in the Study.

2.1. Inflation

To develop a multi-year plan, we make projections of expenses and non-rate revenues. The Study Period spans Fiscal Years (FY) 2021 to FY 2030. The inflationary assumptions to make projection for future years are based on input from District staff and/or long-term averages. The inflationary assumptions are presented in **Table 2-1**. Note that the Study incorporates the District's FY 2021 budget and projections for future years are based on these inflationary factors.

- General inflation is based on the change in the annual Consumer Price Index for all Urban Consumers for the San Diego-Carlsbad Region.
- Increases in certain wastewater Operations and Maintenance costs were supplied by the District based on discussions with District staff. Salaries, Benefits, and Utilities are projected to be higher than General inflation factor
- The District is using 4% inflation adjustment for future wastewater CIP Projects.
- The reserve interest rate is assumed net of the District's projected investment income based on current market conditions.

Table 2-1: Inflationary Assumptions

Category	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
General	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Salaries	4.5%	4.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
CIP Projects*	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Other Capital	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%	3.1%
Utilities	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Reserve Interest Rate	0.3%	0.5%	0.8%	1.0%	1.0%	1.0%	1.0%	1.5%	1.5%	1.5%

2.2. Account and EDU Growth Assumptions

Table 2-2 shows account growth assumptions developed in cooperation with District staff. SFR customer accounts are expected to increase, particularly in the Rancho Cielo service area. No increase in MFR or commercial customers is expected. Commercial Group I customers include office buildings, small retail stores, schools, etc. Commercial Group II customers represent shopping centers, strip malls, medical office buildings and/or restaurants, and large buildings that may have manufacturing facilities.[2]

[2] Note that Commercial III customers have been merged with Commercial II. These are large buildings that may have manufacturing facilities.

Table 2-2: Account Growth Assumptions

Customer Class	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Single Family Residential										
4S, SL	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
RC	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Other										
Multi-Family	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Commercial - Group I	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Commercial - Group II	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table 2-3 shows the projected Equivalent Dwelling Units (EDUs) reflecting the growth assumptions in **Table 2-2**. The EDU definition for MFR has been revised in this study based on the actual flow ratio between MFR and SFR wastewater (sewer) customers. One MFR dwelling unit is equivalent to 0.79 EDU.

Table 2-3: Projected Wastewater EDUs

Customer Class	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Single Family Residential										
4S, SL	3,687	3,724	3,761	3,761	3,761	3,761	3,761	3,761	3,761	3,761
RC	326	336	343	350	357	364	371	378	386	394
Other										
Multi-Family	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203	1,203
Commercial - Group I	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310	1,310
Commercial - Group II	400	400	400	400	400	400	400	400	400	400
Total EDUs	**6,926**	**6,973**	**7,017**	**7,024**	**7,031**	**7,038**	**7,045**	**7,052**	**7,060**	**7,068**

Table 2-4 shows the projected wastewater flow expressed in hundred cubic feet (hcf). Flow is a function of the return factor as shown in **Table 2-4** and account growth factors in **Table 2-2**. The return factor represents the amount of water use returned to 4SWRF. The Study assumes that the return factor will not change for any customer class throughout the Study Period. SFR flows increase due to the growth in those accounts, as reflected in **Table 2-3**.

Note that the SFR class flow is based on *annualized lowest winter water use* from the previous fiscal year. SFR properties tend to have a substantial portion of outdoor water use, which does not flow back into the sewer system as wastewater. Wastewater flow equal to lowest month winter water use is a reasonable estimate of indoor water use as outdoor watering in limited in winter months. Other customer classes (e.g., MFR and Commercial) tend to have less outdoor water use. Thus, their flow is based on *actual* water use from the previous year.

Table 2-4: Projected Wastewater Flow (hcf)

Customer Class	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Return Factor (all classes)	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Single Family Residential (lowest winter use)										
4S, SL	310,668	313,775	316,913	316,913	316,913	316,913	316,913	316,913	316,913	316,913
Single Family - RC	30,012	30,912	31,530	32,161	32,804	33,460	34,129	34,812	35,508	36,218
Other (actual use)										
Multi-Family	92,092	92,092	92,092	92,092	92,092	92,092	92,092	92,092	92,092	92,092
Commercial - Group I	61,729	61,729	61,729	61,729	61,729	61,729	61,729	61,729	61,729	61,729
Commercial - Group II	53,435	53,435	53,435	53,435	53,435	53,435	53,435	53,435	53,435	53,435
Total Annual Flow (hcf)	**547,936**	**551,943**	**555,699**	**556,330**	**556,973**	**557,629**	**558,298**	**558,981**	**559,677**	**560,387**

2.3. Reserve Assumptions

2.3.1. RESERVE POLICY BACKGROUND

A reserve policy is a written document that provides a basis for a public agency's financial reserves. The Board has adopted a Reserve Policy for the District, which was used to develop the financial plan. Wastewater reserves enable the District to meet working capital requirements, address revenue shortfalls due to economic recessions, and provide funds in case of an asset failure and/or natural disaster. Reserve policies provide guidelines for sound financial management with an overall long-range perspective to maintain financial solvency. Reserves also set aside funds for capital asset replacement as they age (and need to be replaced) and for new capital projects. Adhering to a sustainable reserve policy enhances financial management transparency and achieves or maintains favorable credit rating(s) for future District debt issues.

The appropriate amount of reserves and reserve types are determined by a variety of factors, such as the size of the operating budget, the amount of debt, the type of rate structure, frequency of customer billing and risk of natural disaster. While reserves vary by agency, most reserves tend to fall into the following categories: operating, rate stabilization, capital, and emergency. These are each further discussed below.

Operating Reserve

The purpose of an operating reserve is to provide working capital to support the operation, maintenance, and administration. The District's wastewater service charges are collected through the County Tax Collector's office at the same time that property tax bills are paid by wastewater (sewer) customers (the majority of which are collected on December 15 and April 15.) Due to the timing of these receipts for sewer services, the operating reserve supports the District's cash flow needs during normal operations and ensures that operations can continue should there be significant events that impact cash flows. As it is unlikely for a utility to precisely predict the revenues and revenue requirements for each billing period, a reserve set aside to hedge the risk of monthly negative cash positions is part of prudent financial planning and fiscal management.

Rate Stabilization

Rate stabilization reserves are used to minimize the need for abrupt rate increases that may be needed during times of decreased wastewater flow, economic recessions, or emergencies. The rate stabilization reserve would be used to offset the District's fixed costs. A rate stabilization reserve acts as a buffer to protect customers from experiencing large rate increases.

Capital Reserve

Capital reserves fund the replacement and renewal of a utility's infrastructure. Because utilities are highly capital-intensive enterprises, it is important to accurately estimate long-term capital costs and develop a reserve to fund the

eventual replacement of the system and new capital projects. Capital reserves vary the most (amongst all reserve targets) by agency. There are three accepted industry standard methods used to establish capital reserves:

- One to five times the average capital expense over 5 to 10 years;
- Given percentage of asset value, normally valued at replacement cost, of two to five percent; and
- Asset depreciation normally calculated using replacement cost.

Emergency

An emergency reserve seeks to minimize disruptions in service during a natural disaster or asset/facility failure. An emergency reserve decreases risk by setting aside adequate funds to rebuild/replace an essential facility or pipeline after failure/disaster. Normally, a local public agency performs a critical asset analysis as the basis for the target level of emergency reserve. The District does not currently have an emergency reserve – however the rate stabilization fund has a dual purpose as an emergency fund.

2.3.2. CURRENT RESERVES

The District's current reserve policy follows:

- **Operating Reserve**: A minimum of 180 days of annual wastewater (sewer) operations and maintenance expenditures approved by the Board. The maximum shall not exceed 365 days of annual sewer operations and maintenance expenditures approved by the Board in District's budget. In FY 2021, the minimum and maximum targets were $1.7 million and $3.4 million, respectively.
- **Rate Stabilization:** The rate stabilization reserve minimum is 25% of annual wastewater (sewer) operating and maintenance expenditures approved by the Board and the maximum is 100 percent of annual Board approved operating budget. The minimum and maximum target for FY 2021 were $0.9 million and $3.4 million, respectively.
- **Capital Reserve:** The capital reserve minimum is two years' average of planned capital expenditures of the approved 10-year Wastewater (sewer) Capital Spending Plan. The maximum shall not exceed five years' average of the approved (ten-year) capital improvement plan. In FY 2021 the minimum and maximum targets were $4.1 and $10.2 million, respectively.

Table 2-5 lists the District's FY 2021 audited beginning fund balances for the Operating, Rate Stabilization, and Capital reserves as well as the minimum and maximum targets. Total reserves balance is between the total minimum and maximum targets.

Table 2-5: FY 2021 Beginning Fund Balances[1]

Reserve	FY 2021	Min Target	Max Target
Operating[2]	$1,413,450	$1,714,870	$3,429,740
Rate Stabilization	$2,586,000	$857,435	$3,429,740
Capital	$10,547,319	$4,097,000	$10,242,500
Total Beginning Balance	**$14,546,769**	**$6,669,305**	**$17,101,980**

1 As of 7/1/2020 (audited)

2 Due to timing of County sewer service receipts, beginning operating reserve balance was below reserve target minimum.

2.4. Data Sources

The District provided the following data to aid in preparing this report:

- Revenues and expenses for FY 2020 (actuals) and FY 2021 budgeted, FY 2022 budgeted
- Ten-year Wastewater Capital Improvement Plan
- Debt service payment schedules
- Estimated beginning and ending balances for FY 2021

- Wastewater billing data (with identifying information removed) for FY 2020
- Customer growth projections
- Wastewater asset information
- Total plant influent flow, BOD, and TSS
- Sewer debt and reserve policies

3. Financial Plan

As the first step in the rate study process, Raftelis reviewed the District's revenue requirements. Raftelis analyzed the District's wastewater (WW) annual operating revenues, operation and maintenance (O&M) expenses, transfers between funds, and reserve requirements. This Section of the Report discusses projected revenues, O&M expenses, other reserve funding and revenue adjustments to ensure the Wastewater Utility's fiscal solvency.

3.1. Revenues from Current Wastewater Rates

The total annual SFR customer charge is the sum of the annual system access charge assessed per equivalent dwelling unit (EDU) plus a commodity charge assessed per hundred cubic feet (hcf). The current FY 2021 wastewater charges and rates are presented in **Table 3-1**.

The annual system access charge is a uniform flat charge across all customer classes. The commodity charge is based on an SFR customer's annualized minimum prior year winter water use with a maximum (or cap) use of 10 hcf.[3] For example, a customer with a minimum winter water use of 7 hcf would be charged the following:

$$\textbf{\textit{Total Annual SFR Bill}} = \textbf{\textit{Annual System Access Charge}} + (\textbf{7 hcf x \textit{Flow Charge per hcf}} \textbf{ x 12 months} = \$\textbf{734.65}$$

An SFR using more than 10 hcf will only be assessed the flow charge at 10 hcf monthly (or 120 hcf annually). For example, a customer with a minimum winter water use of 25 hcf would be charged the following:

$$\textbf{\textit{Total Annual SFR Bill}} = \textbf{\textit{Annual System Access Charge}} + (\textbf{10 hcf x \textit{Flow Charge per hcf}} \textbf{ x 12 months} = \$\textbf{971.89}$$

Table 3-1: FY 2021 (Current) Wastewater Charges and Rates

Customer Class	Annual System Access Charge	Commodity Rate
Single Family Residential	***per EDU***	***$/hcf***
4S, SL	$181.09	$6.59
RC	$181.09	$6.59
Other	***per EDU***	***$/hcf***
Multi-Family	$181.09	$6.59
Commercial - Group I	$181.09	$6.59
Commercial - Group II	$181.09	$10.16

Non-SFR customers are charged similarly except the commodity portion of their charge is based on their actual water use. Additionally, non-SFR customers do not have a water use cap.

Raftelis calculated projected revenue under existing rates by multiplying the number of EDUs for each user class by the existing annual system access charge and added to that the revenue from the commodity rate which is the wastewater use for each class multiplied by the commodity rates shown in **Table 3-1**. The resulting revenue under existing rates is shown in line 3 of **Table 3-4**.

[3] For the purposes of determining the sewer use, the District defines winter months as December, January, February, and March of the prior fiscal year.

3.2. Operation and Maintenance Expenses

Using the District's FY 2022 Operation and Maintenance (O&M) budgeted values, future expenses were projected by using the inflation factors in **Table 2-1**. **Table 3-2** summarizes budgeted and projected O&M expenses.

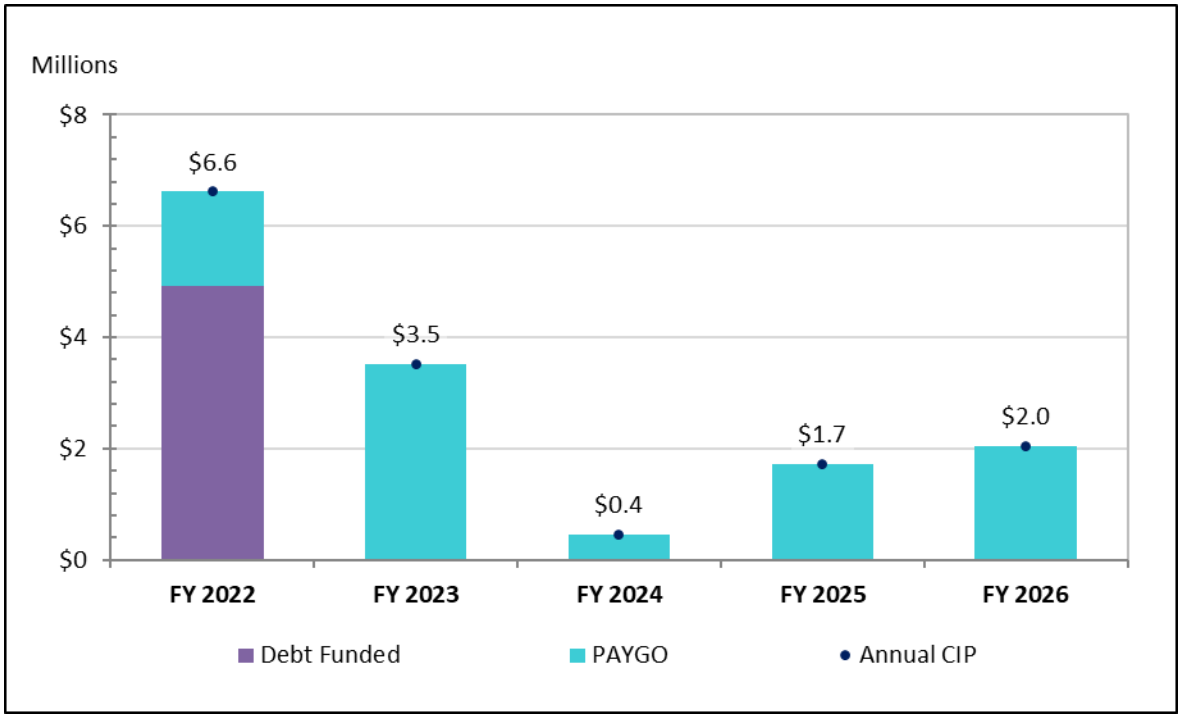
Table 3-2: Projected O&M Expenses

Budget Item	FY 2021 *Budgeted*	FY 2022 *Budgeted*	FY 2023 *Projected*	FY 2024 *Projected*	FY 2025 *Projected*	FY 2026 *Projected*	FY 2027 *Projected*	FY 2028 *Projected*	FY 2029 *Projected*	FY 2030 *Projected*
Personnel	$1,279,000	$1,350,000	$1,390,500	$1,432,215	$1,475,181	$1,519,437	$1,565,020	$1,611,971	$1,660,330	$1,710,140
Operations	$1,494,000	$1,521,000	$1,560,327	$1,597,615	$1,635,843	$1,675,038	$1,715,225	$1,756,433	$1,798,687	$1,842,017
Other	$542,000	$558,740	$575,997	$593,788	$612,127	$631,033	$650,524	$670,616	$691,328	$712,680
Total O&M	**$3,315,000**	**$3,429,740**	**$3,526,825**	**$3,623,618**	**$3,723,152**	**$3,825,508**	**$3,930,769**	**$4,039,019**	**$4,150,345**	**$4,264,837**

3.3. Projected Capital Replacement Projects

The District plans to execute approximately $20.5 million for the WW capital improvement plan (CIP) during the Study Period, as shown in **Figure 3-1**. This is an average of $2.0 million in annual CIP costs inflated across the Study Period. The District assumes a 4% annual inflation adjustment for its future wastewater CIP projects. The purple bar represents CIP that will be funded by debt. The light blue bars in Figure 3-1 below represent future wastewater CIP projects funded by sewer revenue and reserves (PAYGO).

Figure 3-1: Projected Replacement CIP and Funding Sources



3.4. Existing and Proposed Debt

The Wastewater Fund has been allocated 20% of the debt service payment for the District's 2018 Bond Issue. The debt service amounts to just over $129,000 per year each year until FY 2028.

The District plans to issue $5 million in new debt in FY 2022 to fund critical capital projects and reduce the impact on rates.

3.5. Proposed Financial Plan

The District did not implement approved rate increases for FY 2020; the District's WW utility needs revenue adjustments to cover O&M expenses, to fund capital improvement projects and meet target reserves. The proposed sewer revenue adjustments for the next five years are shown in **Table 3-3**. Per Raftelis recommendation, the District will implement a two percent revenue adjustment for FY 2022 and 3% thereafter. It is also recommended that the District issue $5 million in debt in FY 2022.

Table 3-3: Proposed Five-Year Revenue Adjustments

Fiscal Year	Effective Date	Revenue Adjustment
FY 2022	July 1, 2021	2%
FY 2023	July 1, 2022	3%
FY 2024	July 1, 2023	3%
FY 2025	July 1, 2024	3%
FY 2026	July 1, 2025	3%

Table 3-4 shows the operating fund cash flow under the proposed WW revenue adjustments shown in **Table 3-3**. As shown in **Table 3-4** by the net cashflow (line 22), with the proposed revenue adjustment, revenues are sufficient to meet O&M expenses and debt service.

The District has significant capital expenses in FY 2022 and FY 2023 that will be funded through wastewater service charges, cash available in capital reserves, and a new debt issue. The District will exceed its debt coverage target as shown by the projected debt service coverage ratios in **Table 3-4** under the proposed five-year revenue adjustments in **Table 3-3**.

Table 3-4: Proposed Wastewater Financial Plan

Line No.	Description	FY 2021 Budgeted	FY 2022 Budgeted	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected	FY 2028 Projected	FY 2029 Projected	FY 2030 Projected
1	**REVENUES**										
2	**Operating Revenues**										
3	Revenues from Current Rates	$5,055,858	$5,090,808	$5,123,528	$5,128,954	$5,134,459	$5,140,049	$5,145,726	$5,151,494	$5,157,530	$5,163,657
4	Proposed Revenue Adjustments	$0	$101,816	$259,251	$421,179	$588,314	$760,825	$761,665	$762,519	$763,412	$764,319
5	**Total Operating Revenues**	**$5,055,858**	**$5,192,624**	**$5,382,778**	**$5,550,133**	**$5,722,773**	**$5,900,874**	**$5,907,391**	**$5,914,013**	**$5,920,942**	**$5,927,977**
6	**Non-Operating Revenues**										
7	Interest Income	$35,604	$56,537	$94,084	$120,521	$125,630	$123,559	$121,982	$187,130	$195,436	$208,166
8	**Total Non-Operating Revenues**	**$35,604**	**$56,537**	**$94,084**	**$120,521**	**$125,630**	**$123,559**	**$121,982**	**$187,130**	**$195,436**	**$208,166**
9	**TOTAL REVENUES**	**$5,091,462**	**$5,249,161**	**$5,476,863**	**$5,670,654**	**$5,848,403**	**$6,024,433**	**$6,029,373**	**$6,101,143**	**$6,116,378**	**$6,136,142**
10											
11	**EXPENSES**										
12	**Operating Expenses**										
13	Personnel	$1,279,000	$1,350,000	$1,390,500	$1,432,215	$1,475,181	$1,519,437	$1,565,020	$1,611,971	$1,660,330	$1,710,140
14	Operations	$1,494,000	$1,521,000	$1,560,327	$1,597,615	$1,635,843	$1,675,038	$1,715,225	$1,756,433	$1,798,687	$1,842,017
15	Other	$542,000	$558,740	$575,997	$593,788	$612,127	$631,033	$650,524	$670,616	$691,328	$712,680
16	**Subtotal Operating Expenses**	**$3,315,000**	**$3,429,740**	**$3,526,825**	**$3,623,618**	**$3,723,152**	**$3,825,508**	**$3,930,769**	**$4,039,019**	**$4,150,345**	**$4,264,837**
17	**Debt Service**										
18	Series 2018 Bond Issue	$129,174	$129,037	$129,207	$129,071	$129,037	$129,096	$129,045	$129,081	$0	$0
	New Debt Service	$0	$289,150	$289,150	$289,150	$289,150	$289,150	$289,150	$289,150	$289,150	$289,150
19	**Subtotal Debt Service**	**$129,174**	**$418,188**	**$418,357**	**$418,222**	**$418,187**	**$418,247**	**$418,195**	**$418,232**	**$289,150**	**$289,150**
20	**TOTAL EXPENSES**	**$3,444,174**	**$3,847,928**	**$3,945,182**	**$4,041,840**	**$4,141,339**	**$4,243,755**	**$4,348,964**	**$4,457,250**	**$4,439,495**	**$4,553,987**
21											
22	**NET CASHFLOW**	**$1,647,288**	**$1,401,233**	**$1,531,681**	**$1,628,815**	**$1,707,064**	**$1,780,678**	**$1,680,410**	**$1,643,893**	**$1,676,883**	**$1,582,155**
23											
24	***Debt Service Coverage Ratio***	*1375%*	*435%*	*466%*	*489%*	*508%*	*526%*	*502%*	*493%*	*680%*	*647%*
25	***Target Debt Service Coverage Ratio***	*115%*	*115%*	*115%*	*115%*	*115%*	*115%*	*115%*	*115%*	*115%*	*115%*

Projected reserve balances are shown below in **Table 3-5** and fall between the minimum and maximum targets for the five-year period of proposed rates (FY 2022 to FY 2026), as shown in **Figure 3-3**.

Table 3-5: Projected Ending Reserve Balances

Reserve	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
Operating[1]	$3,810,738	$2,347,222	$3,495,975	$3,022,333	$3,373,564	$3,319,032	$3,558,807	$3,624,167	$3,746,731	$3,732,813
Rate Stabilization	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000	$2,586,000
Capital	$7,575,319	$8,691,068	$5,476,996	$7,057,453	$6,626,286	$6,344,496	$6,124,130	$6,658,664	$7,051,983	$8,260,055
Total Ending Balance	**$13,972,057**	**$13,624,290**	**$11,558,971**	**$12,665,786**	**$12,585,850**	**$12,249,528**	**$12,268,938**	**$12,868,830**	**$13,384,713**	**$14,578,868**

[1] Does not include PAYGO transfer to Capital reserve for FY 2021.

Figure 3-2 shows the District's five -year financial plan, with the operating expenses including debt service and the capital expenses shown as stacked bars and the revenues under current and proposed rates shown by the lines. The proposed rate revenue (dark green line) is adequate to cover operating expenses (turquoise bar) and debt service (orange bar). However, when capital expenses are included the reserves have to be drawn down. This is represented by the yellow bars under the x-axis.

Figure 3-2: Proposed Wastewater Financial Plan

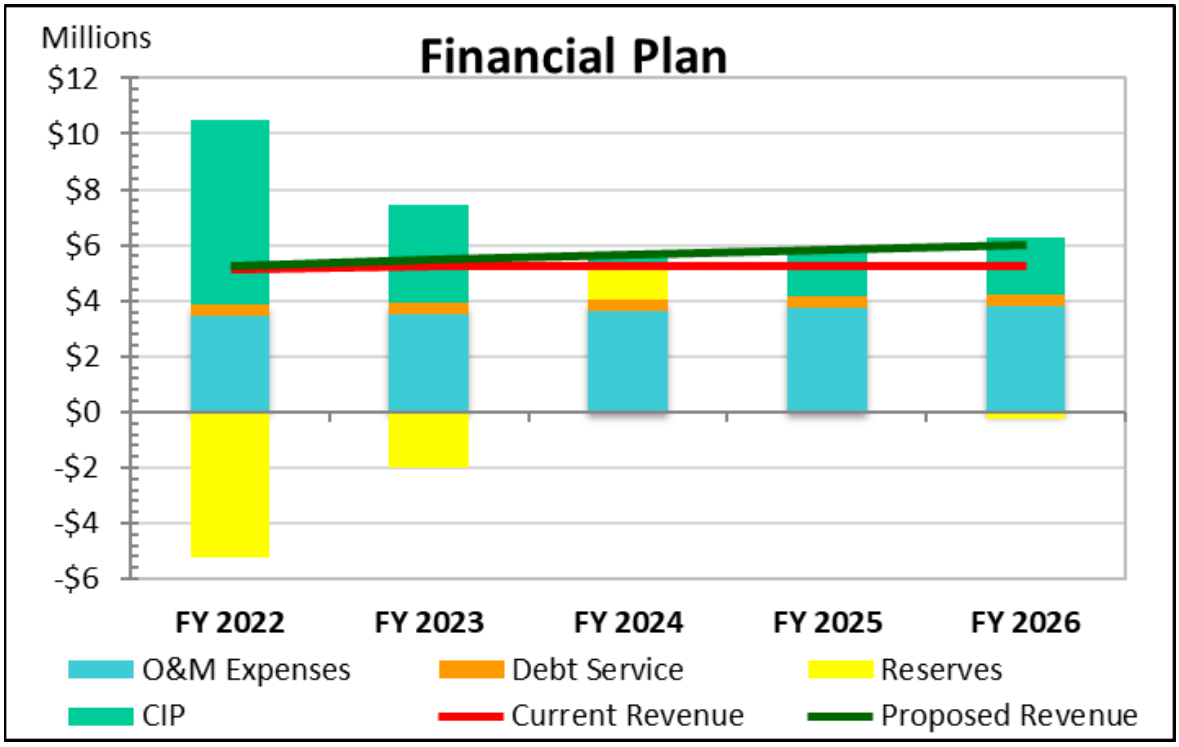
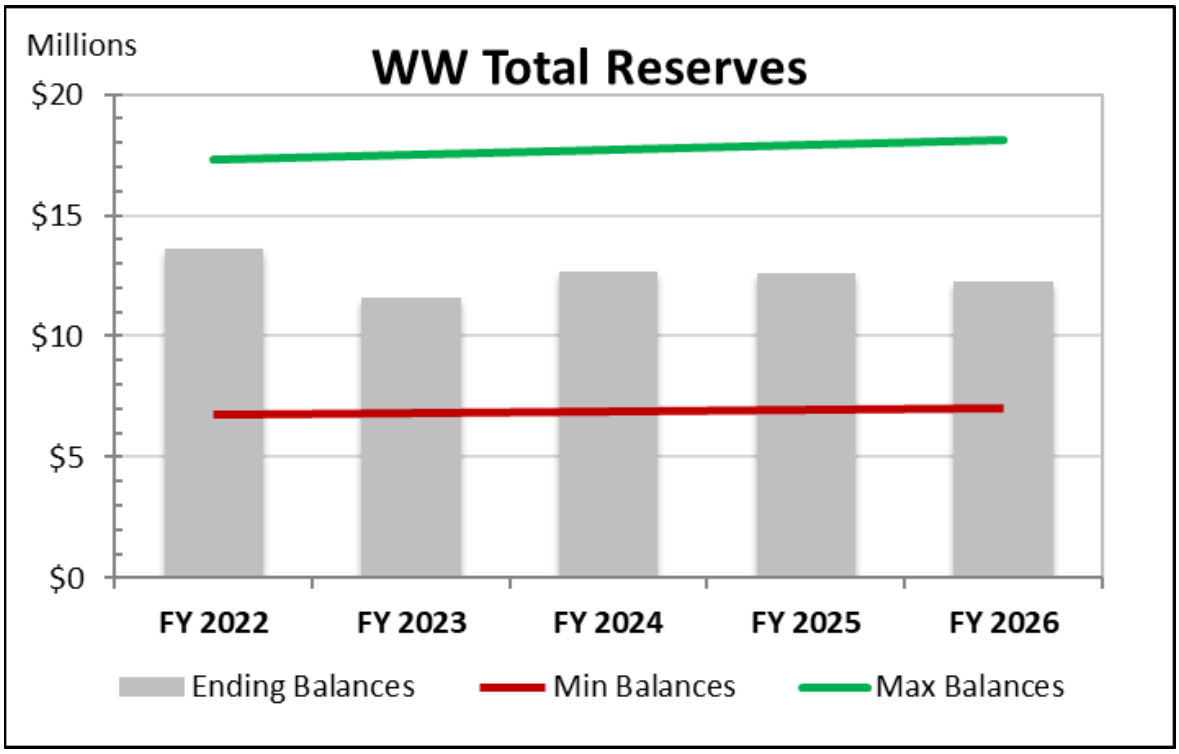


Figure 3-3 shows the total ending reserve balances (including operating reserve, rate stabilization reserve, and capital reserve) under the proposed WW revenue adjustments. The ending balances for each reserve are shown in **Table 3-5**. With the proposed adjustments and debt issue, the total reserve falls between the minimum and maximum target balances for the five-year period during which these changes are proposed.

Figure 3-3: Projected WW Fund Ending Balances



4. Cost of Service Analysis

This Section discusses the allocation of O&M expenses and capital costs to wastewater functions, cost causation components, and subsequently the determination of unit costs and rate calculation by customer class. The proposed WW utility cost of service was developed consistent with guidelines detailed in the Water Environment Federation (WEF) Manual of Practice No. 27, *Financing and Charges for Wastewater Systems, 2018.*

A summary of the COS analysis Raftelis performed is as follows:

1. First, Raftelis used residential and non-residential wastewater strengths consistent with industry standards. Strengths are defined as the concentration of biochemical oxygen demand (BOD[4]) and total suspended solids (TSS)[5] in milligrams per liter (mg/L) in wastewater.
2. Next Raftelis incorporated the estimated flows from each customer class. These were obtained from District provided water use data.
3. The District functionalized the O&M and capital costs into functions: Collection, Treatment, Disposal, Billing and Customer Service and General (Administration).
4. Raftelis allocated O&M costs in each function (from step 3) to cost causation components: Flow, BOD, TSS, Administrative and General. This was subsequently used to allocate the total revenue requirement to each cost causation component.
5. Raftelis calculated unit cost causation component rates by dividing the total cost allocated to each cost causation component in step 4 by the total flow and strength loadings (in pounds of BOD or SS) and equivalent dwelling units (EDU) of the customers.
6. Lastly, Raftelis calculated the cost by customer class by multiplying the unit cost components in step 5 by the flow and strength loading and EDUs from each class.

4.1. Flow and Strength Loadings

The class strengths are shown in **Table 4-1**. The strengths are representative of typical strengths from each class based on industry standards and the strengths used in the prior rate study. To simplify rates and minimize impacts, customers are grouped into three classes based on their strength: residential, low strength commercial and medium-high strength commercial. Residential and Commercial Group I customers, which include office buildings, small retail stores, schools, etc., have the lowest strength since their sewage is typical household wastewater. Commercial Group II customers represent shopping centers, strip malls, medical office buildings, supermarkets and/or restaurants which typically have a higher strength sewage due to the BOD associated with food wastes. Group II also includes one industrial customer previously classified as Group III.

[4] BOD is a measure of oxygen utilization by the microorganisms in wastewater. The more waste matter in a wastewater stream the higher the BOD which in turn incurs higher treatment costs since the wastewater treatment plant must oxygenate the wastewater.

[5] TSS is a measure of the dry-weight of suspended particles in wastewater that have not been dissolved. Filtration processes during treatment remove TSS. As with BOD, the treatment costs increase as the solid matter increases.

Table 4-1: Customer Class Strength Classifications

Customer Class	BOD (mg/L)	TSS (mg/L)
Single Family Residential		
4S, SL	275	275
RC	275	275
Other		
Multi-Family	275	275
Commercial - Group I	225	225
Commercial - Group II	725	725

Raftelis determined the wastewater flow, BOD and TSS plant loadings generated by each customer class as shown in **Table 4-2**. The flow is based on lowest winter water usage for SFR customers and strengths shown in **Table 4-1.** The flow, loadings, and EDUs from each class were used to develop unit costs to distribute the total revenue requirement to each customer class so that each customer class is assigned costs proportionally to its customer characteristics.

Table 4-2: FY 2020 Flow and Strength Loadings

Customer Class	FY 2020 Flow (MG / yr) (1)	BOD (lbs / yr) (2)	TSS (lbs / yr) (3)	FY 2020 Flow (hcf / yr) (4)	BOD (mg / L) (5)	TSS (mg / L) (6)
Single Family Residential						
4S, SL	205.7	472,147	472,147	275,040	275	275
RC	19.8	45,464	45,464	26,484	275	275
Total SFR	**226**	**517,611**	**517,611**	**301,524**	**275**	**275**
Other						
Multi-Family	66.8	153,348	153,348	89,330	275	275
Commercial - Group I	51.3	96,305	96,305	68,567	225	225
Commercial - Group II	43.6	263,740	263,740	58,276	725	725
Total Other	**162**	**513,393**	**513,393**	**216,173**	**380**	**380**

4.2. Allocation of O&M and Capital to Cost Causation Components

In the Cost of Service analysis, our goal is to allocate the District revenue requirement to each cost causation component. To do so we first functionalize and then allocate each line item in the District's O&M costs. The actual costs for FY 2020 are used to define costs for the different functions. The total expenses (shown in line 9, column 5 of **Table 4-3**) are allocated to each cost causation component as shown in **Table 4-3**. The allocation for each O&M functional cost is determined by multiplying the total in column 5 by the respective percentages for each cost causation component shown in lines 1 through 3. The resulting allocation (line 10) is calculated by dividing the total amount allocated to each cost causation component by the total O&M budget in line 9, column 5. Line 10 shows the resulting percentage allocation of O&M costs to each cost causation component and is used to allocate the FY 2022 costs.

Approximately 39% of O&M costs are allocated to flow and 9% each to BOD and SS and the remaining 42% to Customer/Capacity.[6] The resulting allocation in line 10 is used in a subsequent step in **Table 4-7**. Raftelis also calculated the percent distribution of each functionalized cost category (e.g., Collection, Treatment, and General), which will be used to allocate the FY 2022 Capital Revenue Requirement to each function as shown in the last column of **Table 4-3** lines 6 through 8.

Table 4-3: O&M Allocation

Line No	O&M Category	Flow	BOD	TSS	Customer / Capacity	TOTAL
		(1)	(2)	(3)	(4)	(5)
1	Collection	100%	0%	0%	0%	100%
2	Treatment	50%	25%	25%	0%	100%
3	General	0%	0%	0%	100%	100%
4						

5	O&M Category	Flow	BOD	TSS	Customer / Capacity	TOTAL	Percent Total
6	Collection	$610,032	$0	$0	$0	$610,032	20%
7	Treatment	$576,693	$288,346	$288,346	$0	$1,153,386	38%
8	General	$0	$0	$0	$1,282,769	$1,282,769	42%
9	**TOTAL**	**$1,186,725**	**$288,346**	**$288,346**	**$1,282,769**	**$3,046,187**	**100%**
10	% Allocation	*39%*	*9%*	*9%*	*42%*	*100%*	

Similar to the District's O&M expenses, Raftelis functionalized District assets and allocated the functionalized asset value to the cost causation components. Raftelis used the replacement cost to value District assets.[7] **Table 4-4** shows the functionalization and allocation of assets to cost causation components. The allocation of assets is developed in the same manner as that of O&M costs in **Table 4-3**. According to industry standards, collection assets are allocated 100% to flow and treatment is allocated to flow, BOD and SS to reflect the cost of treating the strength component of sewage. Line 11 of **Table 4-4** shows the overall wastewater asset percentage allocation to the cost causation components.

The overall asset allocation, in line 11, is used in a subsequent step, in **Table 4-7**, to allocate capital related expenses to the cost causation components. Since capital expense projects can vary from year to year, it is standard industry practice to use the basis for asset allocation to allocate capital costs to preclude sharp changes to rates from year to year because over the long term all assets need to be replaced and using the total asset allocation serves the purpose of assigning capital costs to the appropriate cost causation centers. Raftelis allocated each functionalized category (e.g., Land, Treatment, Collection, and General to cost causation components to allocate the FY 2022 Capital Revenue Requirement. Note that the capital costs in the "Land" category in **Table 4-4** are combined with the capital costs in the "General" category.

[6] Due to rounding, the percentages do not add up to exactly 100%.
[7] Replacement cost refers to the amount that the District would pay if they were to replace a given asset today. The 20-City Engineering News-Record Construction Cost Index is used to calculate replacement cost of capital assets.

Table 4-4: Capital Allocation using Replacement Costs

Line No	Asset Category	Flow	BOD	TSS	Customer / Capacity	TOTAL	
		(1)	(2)	(3)	(4)	(5)	
1	Land	0%	0%	0%	100%	100%	
2	Treatment	50%	25%	25%	0%	100%	
3	Collection	100%	0%	0%	0%	100%	
4	General	0%	0%	0%	100%	100%	
5	Asset Category	Flow	BOD	TSS	Customer / Capacity	TOTAL	Percent Total
6	Land	$0	$0	$0	$535,485	$535,485	0.5%
7	Treatment	$16,665,535	$8,332,768	$8,332,768	$0	$33,331,071	31.6%
8	Collection	$63,719,006	$0	$0	$0	$63,719,006	60.4%
9	General	$0	$0	$0	$7,962,710	$7,962,710	7.5%
10	**TOTAL**	**$80,384,542**	**$8,332,768**	**$8,332,768**	**$8,498,194**	**$105,548,271**	**100%**
11	% Allocation	*76%*	*8%*	*8%*	*8%*	*100%*	

4.3. Revenue Requirement Determination

Next Raftelis determined the wastewater revenue requirement, which includes funds to cover yearly operating expenses, capital expenses and reserve funding. **Table 4-5** shows the determination of the rate revenue requirement. To determine the current revenue requirement, Raftelis added operating, debt service, and capital expenses as shown in line 5 column 3, subtracted other non-rate revenues as shown in line 9, and subtracted the annual cash balance (drawdown of the reserves, in this case) in line 13 to yield the net revenue requirement shown in line 15, column 3. This is the total amount of revenue to be recovered from rates. This is also known as the test year rate revenue requirement.

Table 4-5: Revenue Requirement

Line No	Description	Operating (1)	Capital (2)	Total (3)
1	**Revenue Requirement**			
2	O&M	$3,429,740	$0	$3,429,740
3	Debt Service	$0	$418,188	$418,188
4	Rate Funded Capital Projects	$0	$1,692,000	$1,692,000
5	**Total Revenue Requirement**	**$3,429,740**	**$2,110,188**	**$5,539,928**
6				
7	**Revenue Offsets**			
8	Interest Income	$56,537	$0	$56,537
9	**Total Revenue Offsets**	**$56,537**	**$0**	**$56,537**
10				
11	**Less Adjustments**			
12	Transfer from (to) Reserves	$0	$290,767	$290,767
13	**Total Less Adjustments**	**$0**	**$290,767**	**$290,767**
14				
15	**Rate Revenue Requirement**	**$3,373,203**	**$1,819,421**	**$5,192,624**

4.4. Determine Units of Service

To develop unit costs by cost causation component, Raftelis first determined the units of service for each cost causation component. The units of service by cost causation component and by class are shown in **Table 4-6**. Line 10 shows the total units of service for each cost causation component in hcf, pounds per year for BOD[8] and TSS[9] or equivalent dwelling units (EDUs) respectively. The flows and loadings represent FY 2022 projections.

Table 4-6: FY 2022 Units of Service Determination

Line No.	Customer Class	FY 2022 Billed Sewer Use (hcf) (1)	BOD (lbs / yr) (2)	TSS (lbs / yr) (3)	EDUs (4)
1	**Single Family Residential**				
2	4S, SL	313,775	538,642	538,642	3,724
3	RC	30,912	53,065	53,065	336
4	**Total SFR**	**344,687**	**591,707**	**591,707**	**4,060**
5	**Other**				
6	Multi-Family	92,092	158,090	158,090	1,203
7	Commercial - Group I	61,729	86,700	86,700	1,310
8	Commercial - Group II	53,435	241,831	241,831	400
9	**Total Other**	**207,256**	**486,621**	**486,621**	**2,913**
10	**TOTAL**	**551,943**	**1,078,328**	**1,078,328**	**6,973**

4.5. Determine Unit Costs by Cost Component

In **Table 4-7**, each functional category (e.g., Collection, Treatment, and General) in O&M and Capital Revenue Requirements (**Table 4-5**, columns 1&2, line 15) is allocated to the cost causation components determined in **Table 4-3** and **Table 4-4**, respectively.

To cover the fixed costs of operations which are independent of the flows and loadings, a portion of the general Customer/Capacity costs are allocated to EDUs. Line 15 in **Table 4-7** makes an adjustment so that the District can maintain 25% fixed revenue collection similar to its prior rate structure. This provides the District with reasonable revenue stability in the case of drought and conservation and ensures that all customers share in the cost of the system. The resulting allocation of the revenue requirement to cost components is shown on line 16. To determine the unit cost (by cost causation component), Raftelis divided the revenue requirement for each cost causation component in line 16 by the units of service in line 18 (which were derived in **Table 4-6**, line 10) to yield the unit costs shown in line 20.

[8] For BOD: Yearly load in lbs = flow (hcf)*748 gal/1,000,000* strength (mg/L)* 8.34
[9] For TSS: Same as BOD
8.34 is a conversion factor to convert MGD*mg/L into lbs. per day

Table 4-7: Determination of Units of Service by Cost Component

Line No.	Description	Flow	BOD	TSS	Customer / Capacity	Total
		(1)	(2)	(3)	(4)	(5)
1	**Collection**					
2	Operating Expenses	$675,521	$0	$0	$0	$675,521
3	Capital Expenses	$1,098,376	$0	$0	$0	$1,098,376
4	**Subtotal Collection**	**$1,773,897**	**$0**	**$0**	**$0**	**$1,773,897**
5	**Treatment**					
6	Operating Expenses	$638,602	$319,301	$319,301	$0	$1,277,205
7	Capital Expenses	$287,277	$143,639	$143,639	$0	$574,555
8	**Subtotal Treatment**	**$925,880**	**$462,940**	**$462,940**	**$0**	**$1,851,759**
9	**General**					
10	Operating Expenses	$0	$0	$0	$1,420,478	$1,420,478
11	Capital Expenses	$0	$0	$0	$146,490	$146,490
12	**Subtotal General**	**$0**	**$0**	**$0**	**$1,566,968**	**$1,566,968**
13						
14	**Total Operating & Capital Costs**	**$2,699,776**	**$462,940**	**$462,940**	**$1,566,968**	**$5,192,624**
15	Adjustments to Fixed Charges	$200,166	$34,323	$34,323	($268,812)	$0
16	**Adjusted Revenue Requirement**	**$2,899,942**	**$497,263**	**$497,263**	**$1,298,156**	**$5,192,624**
17						
18	Unit of Service	551,943	1,078,328	1,078,328	6,973	
19	Units	*hcf*	*lbs/yr*	*lbs/yr*	*EDUs*	
20	**Unit Cost**	**$5.25**	**$0.46**	**$0.46**	**$186.17**	

4.6. Determine the Costs of Service

The final and ultimate step is to determine the cost of service for each customer class. Raftelis calculated the cost to serve each class by multiplying the unit costs in **Table 4-7** (line 20) by the respective units of service in **Table 4-6** (lines 2-8). The general calculation for the customer class cost of service is as follows:

$$\sum_{n=1}^{4} unit\ of\ service_n \times unit\ cost_n$$

where *n* represents the four cost components (e.g., Flow, BOD, TSS, Customer/Capacity), the *unit of service* is from **Table 4-6**, and *unit cost* is from **Table 4-7**. For example, the total calculation for Commercial Group I is:

$$(61{,}729\ x\ \$5.25) + (86{,}700\ x\ \$0.46) + (86{,}700\ x\ \$0.46) + (1{,}310\ x\ \$186.17) = \$648{,}277$$

Because of rounding errors, the calculations shown above will not add exactly to $648,277. Note that the total cost of service shown in line 8, column 5 equals the net revenue requirement shown in **Table 4-5** (line 15, column 3). This is the amount of revenue that needs to be collected from each class through a fixed and volumetric rate structure.

The results of the calculation of costs to each customer class are presented in **Table 4-8**

Table 4-8: Cost of Service Derivation

Line No.	Description	Flow (1)	BOD (2)	TSS (3)	Customer / Capacity (4)	Total (5)
1	**Single Family Residential**					
2	4S, SL	$1,648,593	$248,391	$248,391	$693,293	**$2,838,667**
3	RC	$162,414	$24,471	$24,471	$62,553	**$273,907**
4	**Other**					
5	Multi-Family	$483,857	$72,902	$72,902	$223,961	**$853,622**
6	Commercial - Group I	$324,328	$39,981	$39,981	$243,881	**$648,172**
7	Commercial - Group II	$280,751	$111,519	$111,519	$74,468	**$578,256**
8	**TOTAL COST**	**$2,899,942**	**$497,263**	**$497,263**	**$1,298,156**	$5,192,624

5. Wastewater Rates

Wastewater rates and charges are derived based on the cost to serve each class. The annual system access charge is calculated in **Table 4-7**. This is a uniform rate for all customer classes that is assessed annually.

Table 5-1: Proposed FY 2022 Annual System Access Charge

Line No.	Customer Class	System Access Charge ($ / EDU)	System Access Charge ($ / dwelling unit)
1	**Single Family Residential**		
2	4S, SL	**$186.17**	**$186.17**
3	RC	**$186.17**	**$186.17**
4	**Other**		
5	Multi-Family	**$186.17**	**$147.32**
6	Commercial - Group I	**$186.17**	
7	Commercial - Group II	**$186.17**	

For simplicity, ease of administration, and consistency with the current rate structure the District will continue charging the same commodity rate to SFR, MFR, and Group 1 Commercial customers. **Table 5-2** presents the calculation of the commodity rates for these customers. **Table 5-2** shows the sum of the commodity rate revenue requirement (line 7, column 1) for SFR, MFR, and Group I Commercial customers and sum of their water (wastewater) use (line 7, column 2). **Table 5-2** also presents Group II Commercial commodity rate revenue requirement and water use in line 8.

Table 5-2: Commodity Rate Revenue Requirement and Water Use

Line No.	Customer Class	Commodity Rate Revenue Requirement (1)	Water Use (hcf) (2)
1	**SFR**		
2	4S & SL	$2,145,374	313,775
3	RC	$211,355	30,912
4	**Other**		
5	Multi-Family	$629,661	92,092
6	Commercial - Group I	$404,290	61,729
7	**SUBTOTAL**	**$3,390,680**	**498,508**
8	Commercial - Group II	**$503,788**	**53,435**

Table 5-3 consolidates the data in **Table 5-2** for all customer classes. The commodity rate ($/hcf) in column 3 is calculated by dividing the commodity rate revenue requirement (column 1) by the water use (column 2).

Table 5-3: Proposed FY 2022 Commodity Rate ($/hcf)

Customer Class	Commodity Rate Revenue Requirement (1)	Water Use (hcf) (2)	Commodity Rate ($/hcf) (3)
SFR, Multi-Family, Com. Group I	$3,390,680	498,508	**$6.81**
Commercial - Group II	$503,788	$53,435	**$9.43**

Note: The exact value of the final commodity rates may differ +/- $0.01 due to rounding.

Based on the proposed revenue adjustments in **Table 3-3**, Raftelis calculated rates from FY 2022 to FY 2026 for the annual system access charge (**Table 5-4**) and commodity rates (**Table 5-5**).

Table 5-4: Proposed Five-Year Annual System Access Charge

Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
RC	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Other						
Multi-Family	$181.09	$147.33	$151.75	$156.31	$161.00	$165.83
Commercial - Group I	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Commercial - Group II	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56

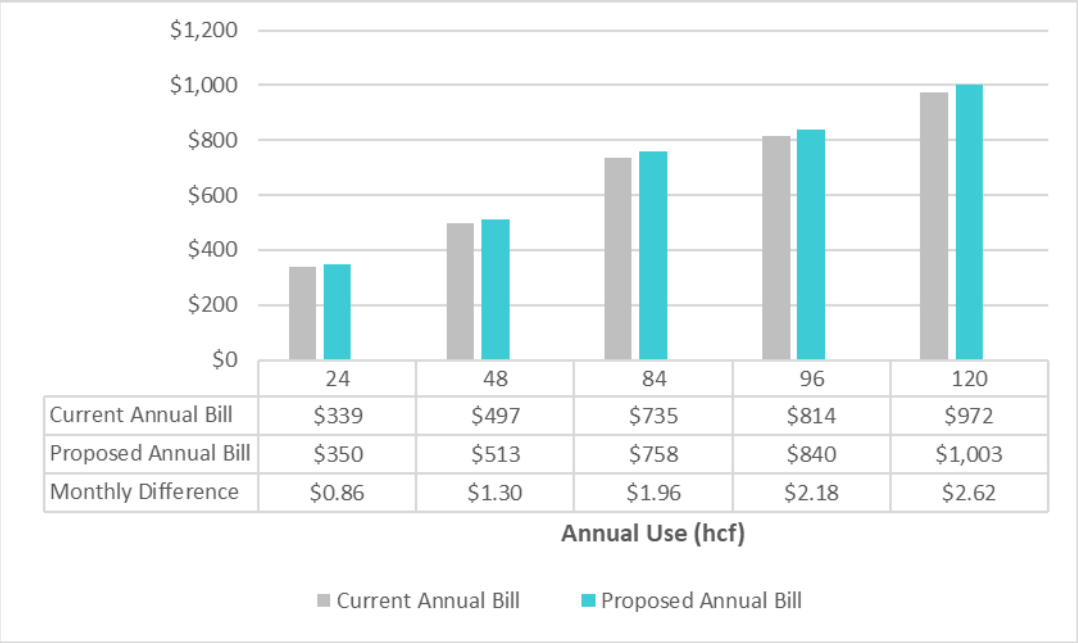
Table 5-5: Proposed Five-Year Commodity Rates ($/hcf)

Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
RC	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Other						
Multi-Family	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group I	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group II	$10.16	$9.43	$9.72	$10.02	$10.33	$10.64

6. Customer Bill Impact Analysis

Figure 6-1 shows the customer bill impacts for SFR customers assuming different water use points. SFR customers are billed based on their minimum winter monthly (prior year) usage up to a cap of 10 hcf per month (120 hcf annually). The average SFR winter monthly use is 7 hcf, which is annualized to 84 hcf.

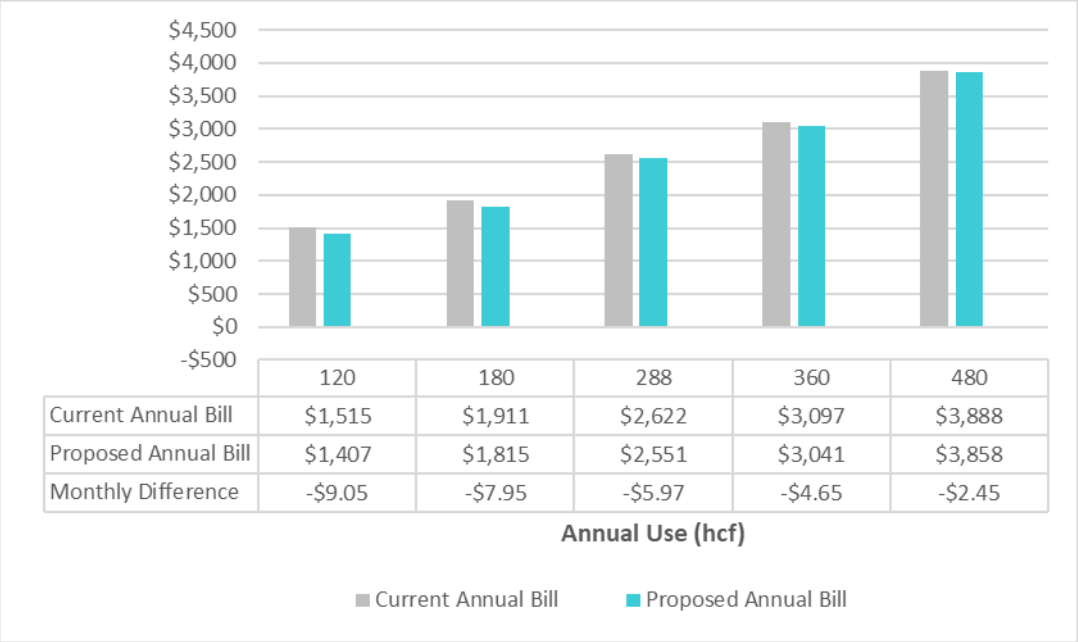
Figure 6-1: SFR Annual Bill Impacts



	24	48	84	96	120
Current Annual Bill	$339	$497	$735	$814	$972
Proposed Annual Bill	$350	$513	$758	$840	$1,003
Monthly Difference	$0.86	$1.30	$1.96	$2.18	$2.62

MFR customers are billed based on actual water use without a cap. Bill impacts are shown in **Figure 6-2** for a four unit MFR account. Similar to SFR customers, each dwelling unit is assessed the annual system access charge plus their share of water use for the dwelling unit complex. For example, assuming a condo with 4 dwelling units, the charge per dwelling unit would be $147.33 plus ¼ of the water use for the complex multiplied by the commodity rate of $6.81/hcf. The average MFR monthly use is 6 hcf, annualized to 72 hcf and for a four-unit account the average annual use is 288 hcf.

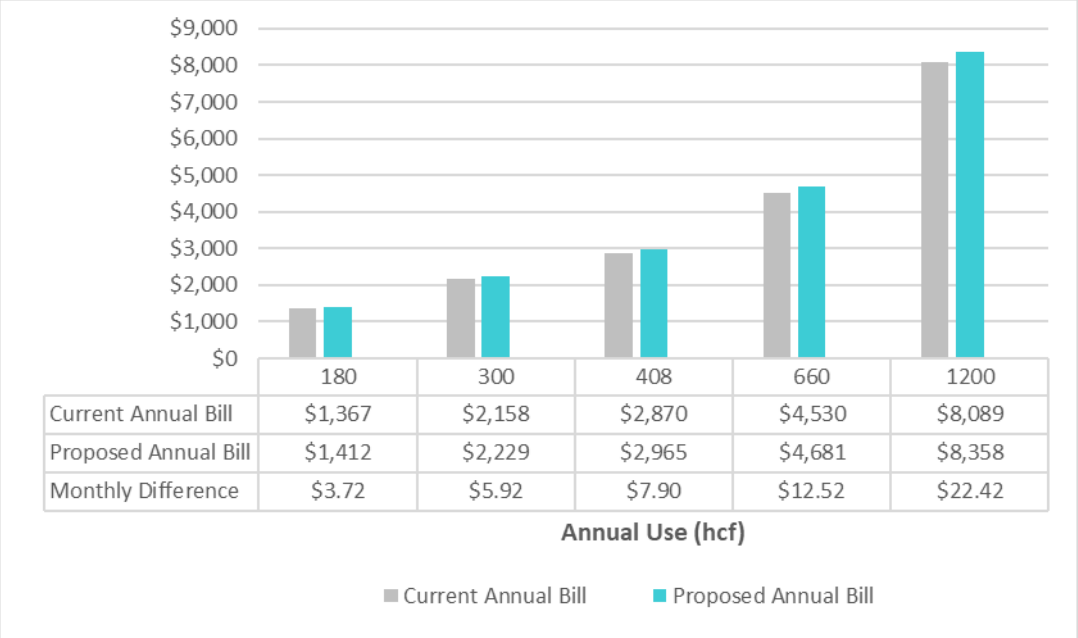
Figure 6-2: MFR Annual Bill Impacts



	120	180	288	360	480
Current Annual Bill	$1,515	$1,911	$2,622	$3,097	$3,888
Proposed Annual Bill	$1,407	$1,815	$2,551	$3,041	$3,858
Monthly Difference	-$9.05	-$7.95	-$5.97	-$4.65	-$2.45

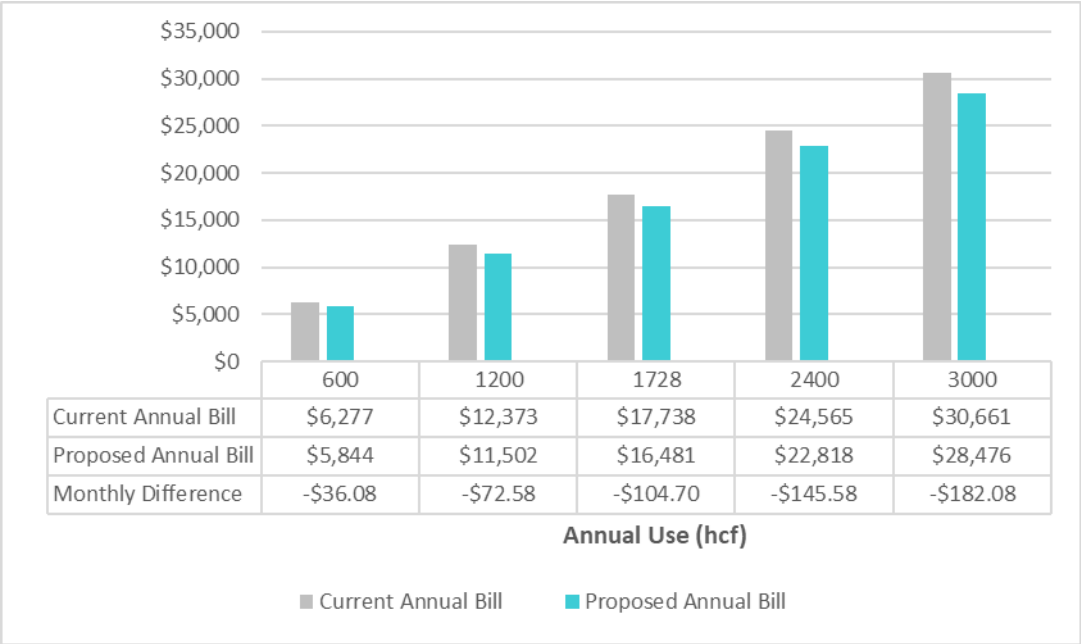
Figure 6-3 shows the bill impacts for Group I Commercial customers. Each commercial account is assessed a charge which is the sum of the number of EDUs times the annual system access charge and *actual water use* multiplied by the commodity rate. The average Group I Commercial monthly use is 34 hcf, annualized to 408 hcf. Group II Commercial customers are charged in an analogous manner, with bill impacts illustrated in **Figure 6-4**. The average Group II Commercial monthly use is 144 hcf, annualized to 1,728 hcf.

Figure 6-3: Commercial Group I Annual Bill Impacts



	180	300	408	660	1200
Current Annual Bill	$1,367	$2,158	$2,870	$4,530	$8,089
Proposed Annual Bill	$1,412	$2,229	$2,965	$4,681	$8,358
Monthly Difference	$3.72	$5.92	$7.90	$12.52	$22.42

Figure 6-4: Commercial Group II Annual Bill Impacts

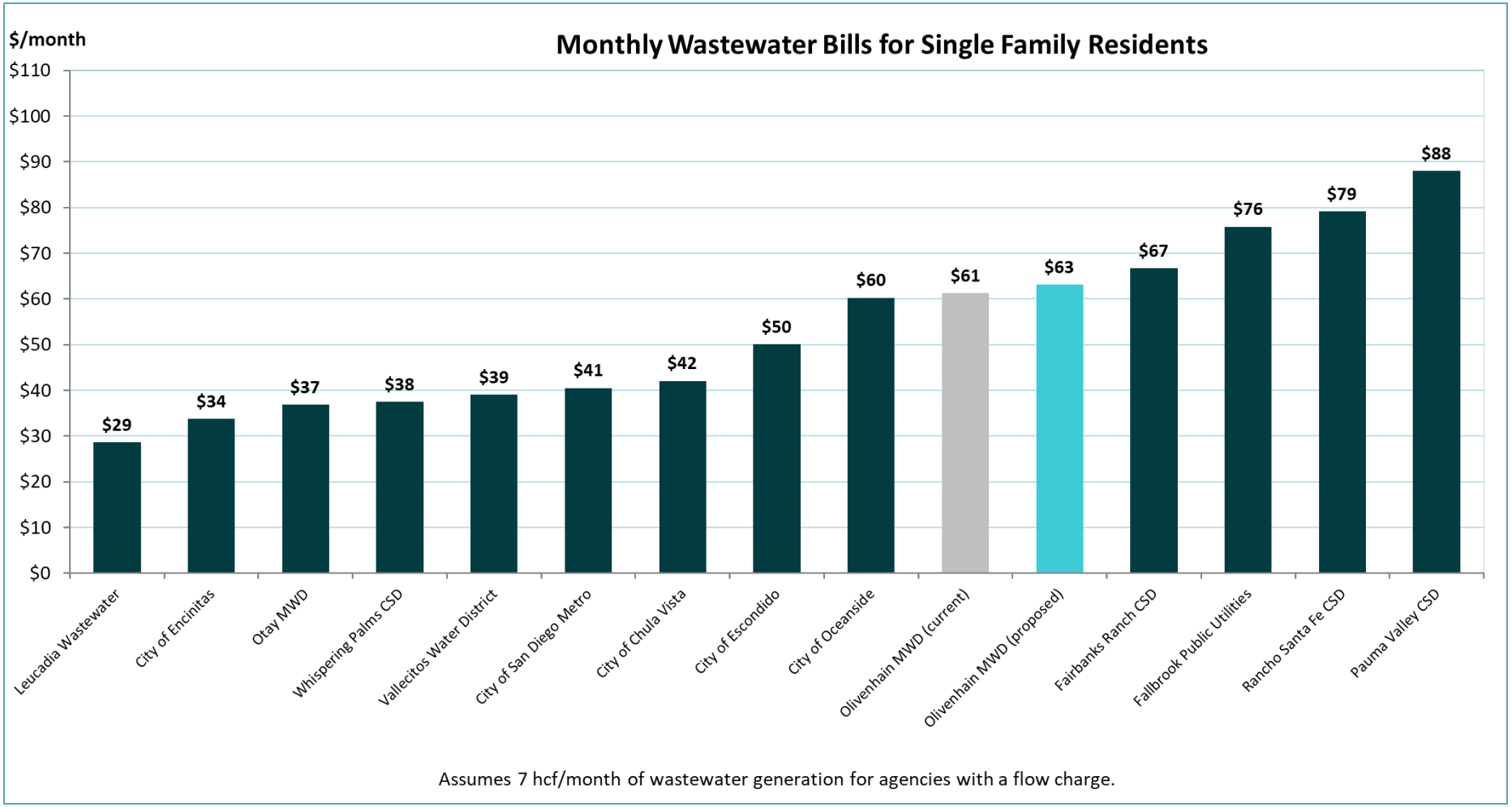


	600	1200	1728	2400	3000
Current Annual Bill	$6,277	$12,373	$17,738	$24,565	$30,661
Proposed Annual Bill	$5,844	$11,502	$16,481	$22,818	$28,476
Monthly Difference	-$36.08	-$72.58	-$104.70	-$145.58	-$182.08

7. Rate Survey

Raftelis conducted a survey of surrounding agencies in San Diego County in November of 2020. The sewer service charges for SFR customers using 7 hcf per month are shown below. Care should be taken however, in drawing conclusions from such a comparison as some factors including geographic location, demand, customer constituency, level of treatment, level of grant funding, age of system, level of capital funding and debt, and rate-setting methodology can affect the cost of providing service.

Figure 7-1: Single-Family Residential Wastewater Bill Comparison



Olivenhain
Municipal Water District

Wastewater Rates Workshop

Finance Committee Meeting– Feb 2, 2021

OLIVENHAIN
Municipal Water District

RAFTELIS

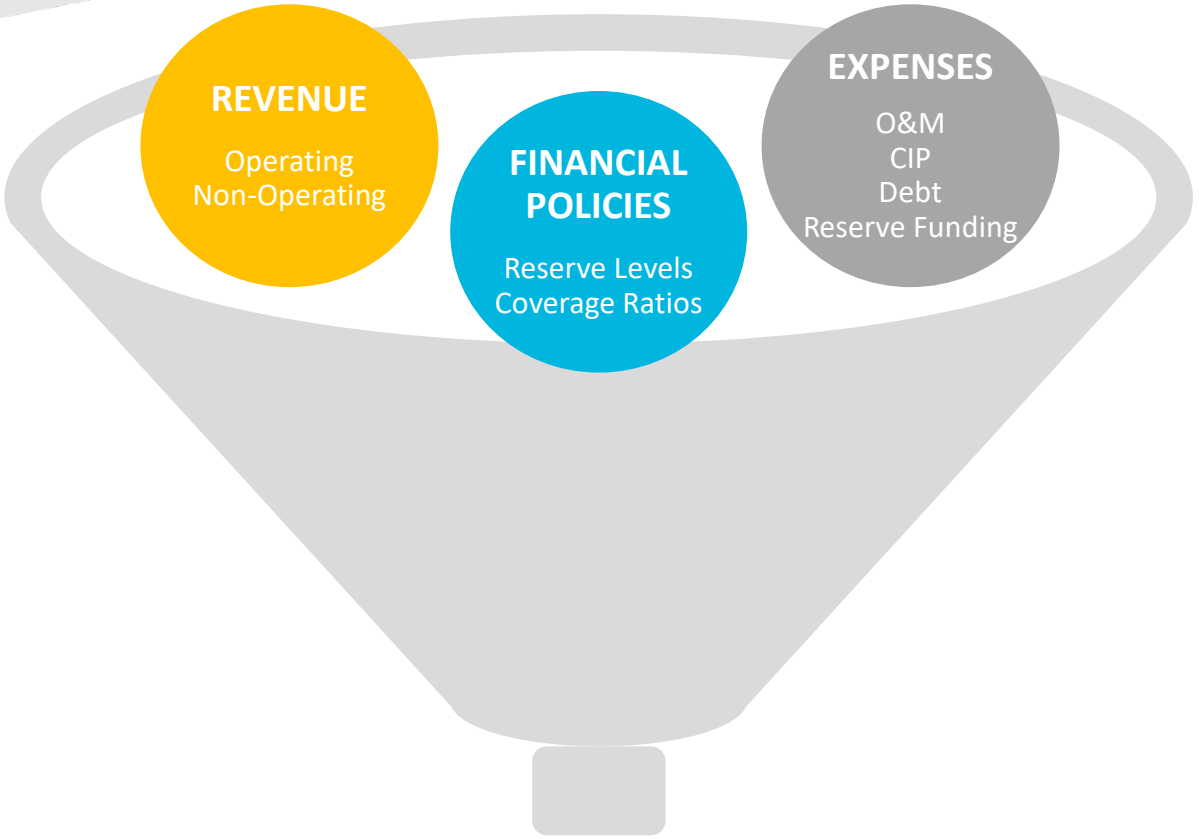
AGENDA

- Study objectives
- Overview of financial planning
- Review proposed 5-year financial plan
- Cost of service allocation
- Review rate structure
- Customer impacts
- Questions & Discussion

STUDY OBJECTIVES

- Recover projected operating and capital costs in the next 5 years
- Finalize 5-year wastewater financial plan
  - Proposed revenue adjustments
- Design wastewater rates to ensure customers pay in proportion to service received

OVERVIEW OF FINANCIAL PLAN



Revenue Adjustment Schedule
Multi-Year Financial Plan

FINANCIAL PLAN ASSUMPTIONS

- Cost escalation:
  - General cost inflation: 2% increase per year
  - Salaries and Benefits: based on OMWD's Labor MOU
  - Utilities and Capital: 3% per year
  - Other: 1% increase per year
- Investment: 0.5% increasing to 1% in 2 years
- Account growth:
  - Less than 1% SFR and MFR only
  - Estimate build-out in 2030
- Terms of future revenue bond debt:
  - 30-year term
  - 4% interest rate
  - Issuance costs of 1.5% of total issue

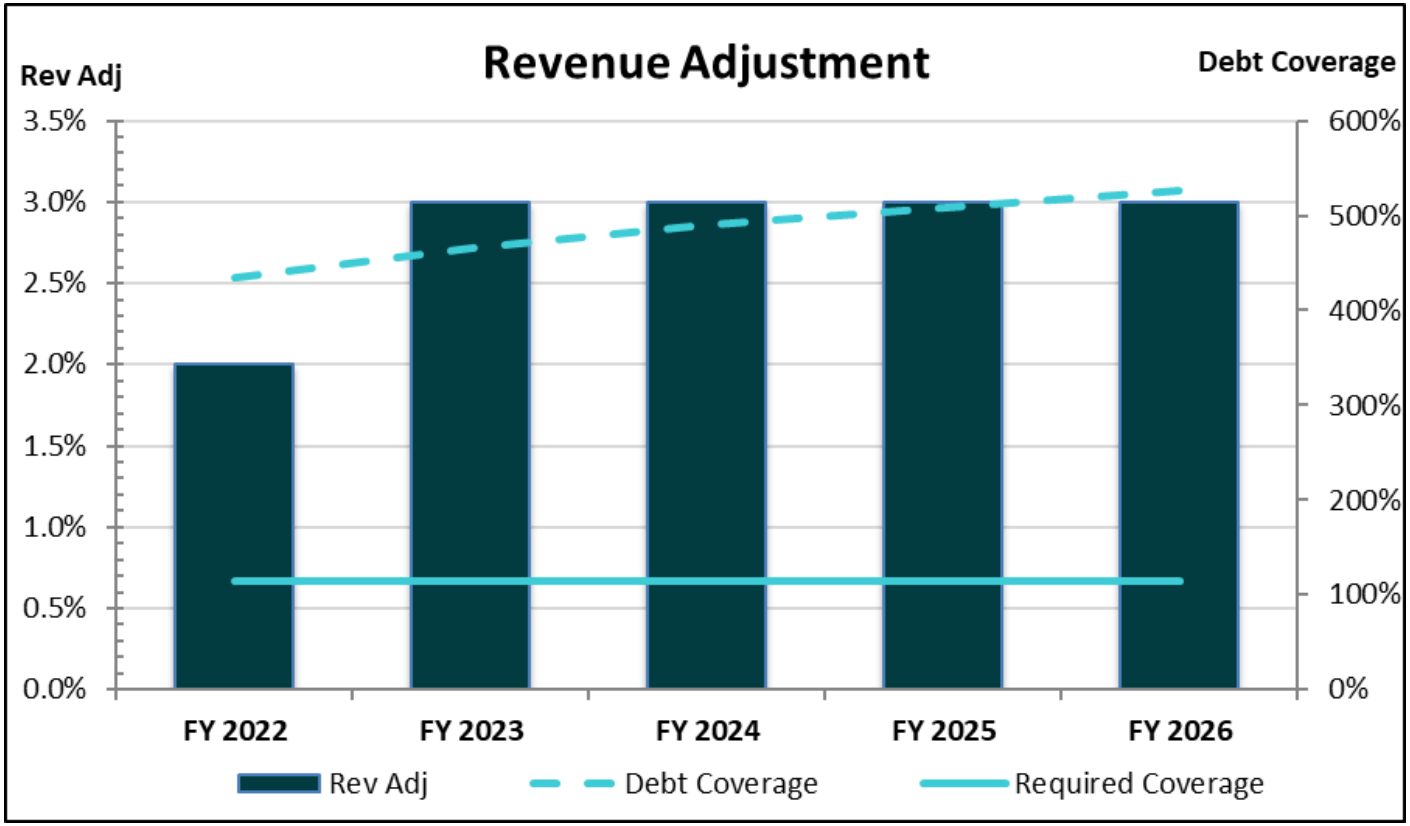
CURRENT RESERVE POLICIES

- Operating Fund Target:
  - Min: 180 days of annual O&M
  - Max: 365 days of annual O&M
- Capital and Equipment Fund Target:
  - Min: 2 year of average planned CIP over 10 years
  - Max: 5 years of average planned CIP over 10 years
- Rate Stabilization Fund Target:
  - Min: 25% of annual O&M
  - Max: 100% of annual O&M
- Total Min target for FY 21 is $6.7 million
- Total Max target for FY 21 is $17.1 million

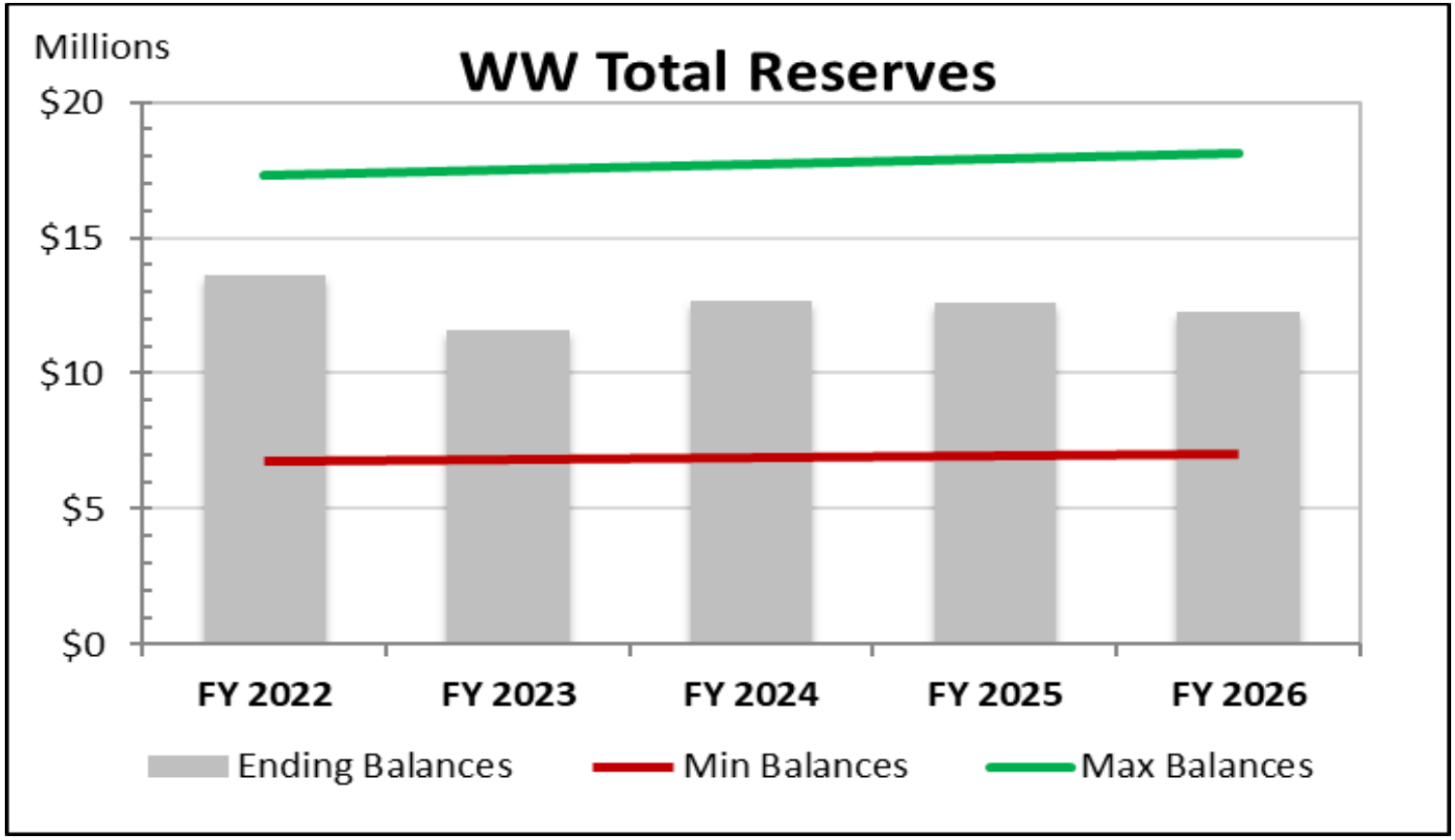
PROPOSED FINANCIAL PLAN

Fiscal Year	Effective Date	Revenue Adjustment	Debt Issue
FY 2022	July 1, 2021	2%	$5,000,000
FY 2023	July 1, 2022	3%	NA
FY 2024	July 1, 2023	3%	NA
FY 2025	July 1, 2024	3%	NA
FY 2026	July 1, 2025	3%	NA

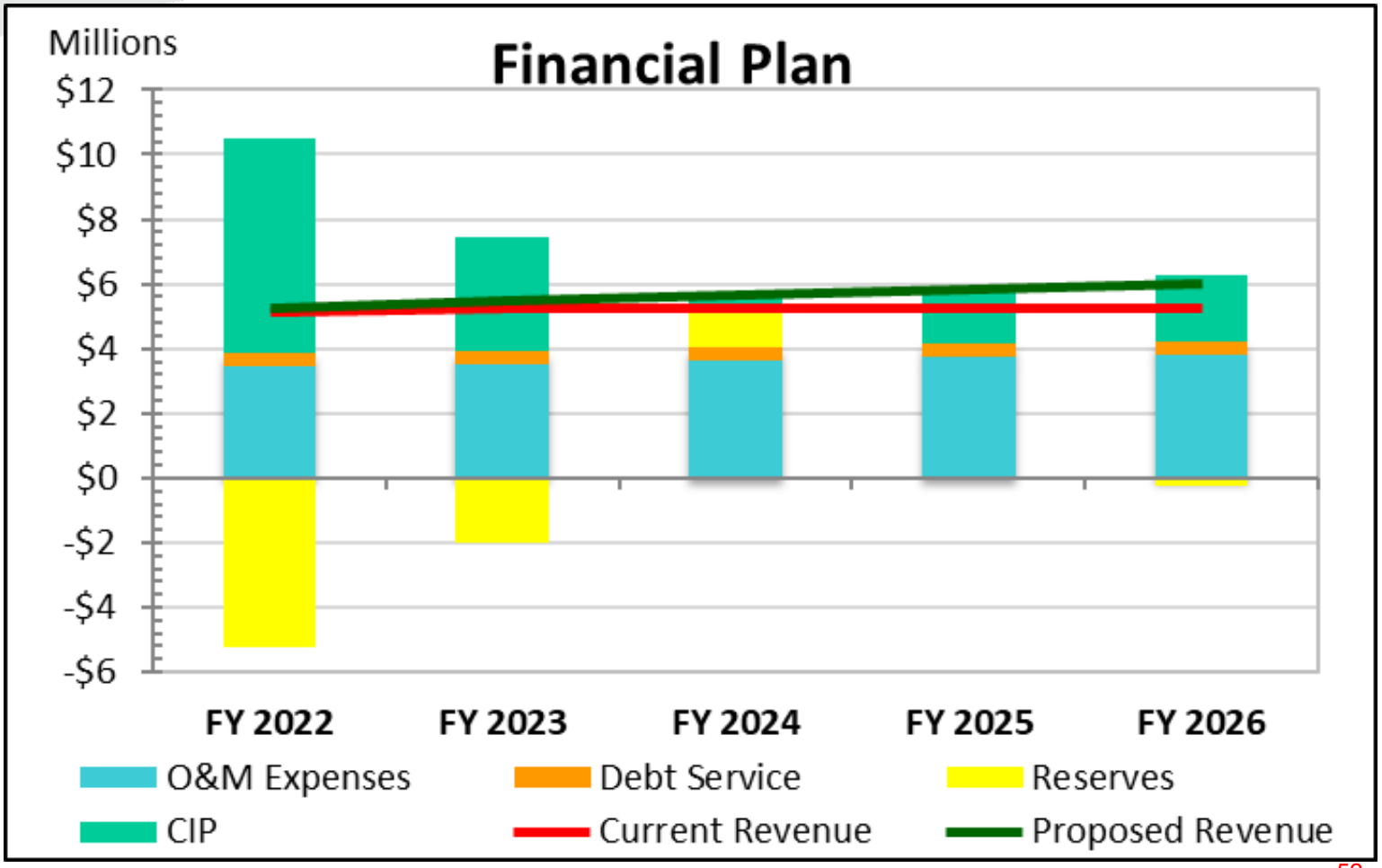
PROPOSED REVENUE ADJUSTMENTS



PROJECTED FUNDS BALANCE



PROPOSED FINANCIAL PLAN



COST OF SERVICE METHODOLOGY

- Kept consistent cost of service allocation methodology from 2014 rate study
- Updated to FY 2020 operating and capital costs and assets values
- Retained current customer classifications, but revised EDU definition for multi-family to reflect wastewater flow

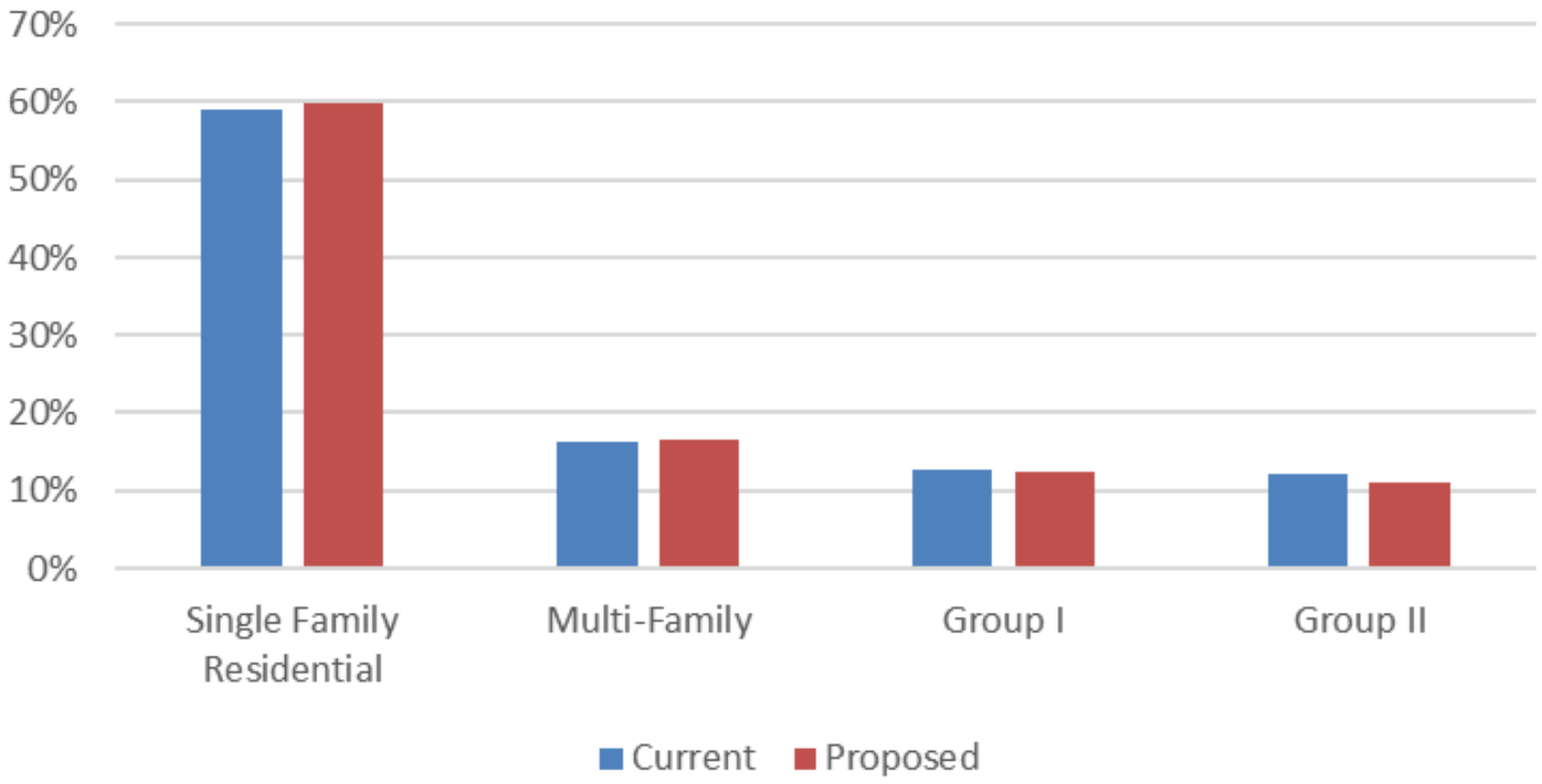
COST OF SERVICE ALLOCATIONS

- Costs are functionalized
  - Collection
    Treatment
  - General
- Functional costs are allocated to
  - Wastewater flow
  - Biochemical oxygen demand
  - Suspended solids
  - Customer equivalent dwelling units (EDU)

CUSTOMER CLASSES

- Customers are divided into
  - Single family
  - Multi-family
  - Group I includes offices, retail stores, schools, etc.
  - Group II includes shopping centers, strip malls, medical offices, restaurants, manufacturing
  - Group III customers merged into Group II

COST OF SERVICE RESULTS



RATE STRUCTURE DESIGN

- Multi-family dwelling unit = 0.79 EDU based on multi family wastewater flow
- Recover 25% of rate revenue on the fixed charges compared to current 26%
- Two rate options:
  - Option 1: Volumetric rates different for individual classes
  - Option 2: Volumetric rates same for single family , multi family and Group I customers for simplicity and ease of administration

WASTEWATER RATES FOR FY 2022

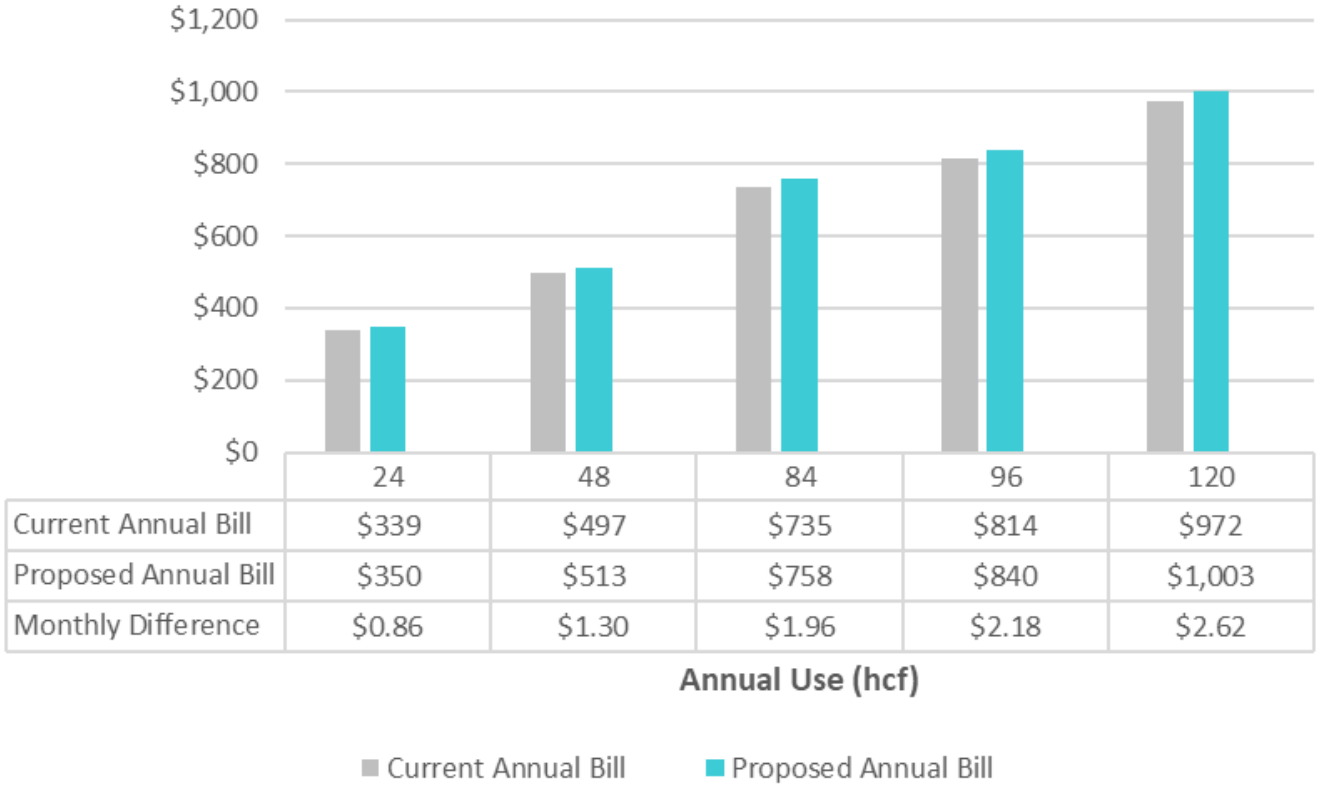
Line No.	Customer Class	System Access Charge ($ / Year)	System Access Charge ($ / EDU)	System Access Charge ($ / dwelling unit)	Option 1: Commodity Rate ($/hcf)	Option 2: Commodity Rate ($/hcf)
1	**Single Family Residential**					
2	4S, SL		**$186.17**	**$186.17**	**$6.84**	**$6.81**
3	RC		**$186.17**	**$186.17**	**$6.84**	**$6.81**
4	**Other**					
5	Multi-Family		**$186.17**	**$147.32**	**$6.84**	**$6.81**
6	Commercial - Group I	**$186.17**	**$186.17**		**$6.55**	**$6.81**
7	Commercial - Group II	**$186.17**	**$186.17**		**$9.43**	**$9.43**

FIVE YEAR RATES

Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
RC	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Other						
Multi-Family	$181.09	$147.33	$151.75	$156.31	$161.00	$165.83
Commercial - Group I	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56
Commercial - Group II	$181.09	$186.17	$191.76	$197.52	$203.45	$209.56

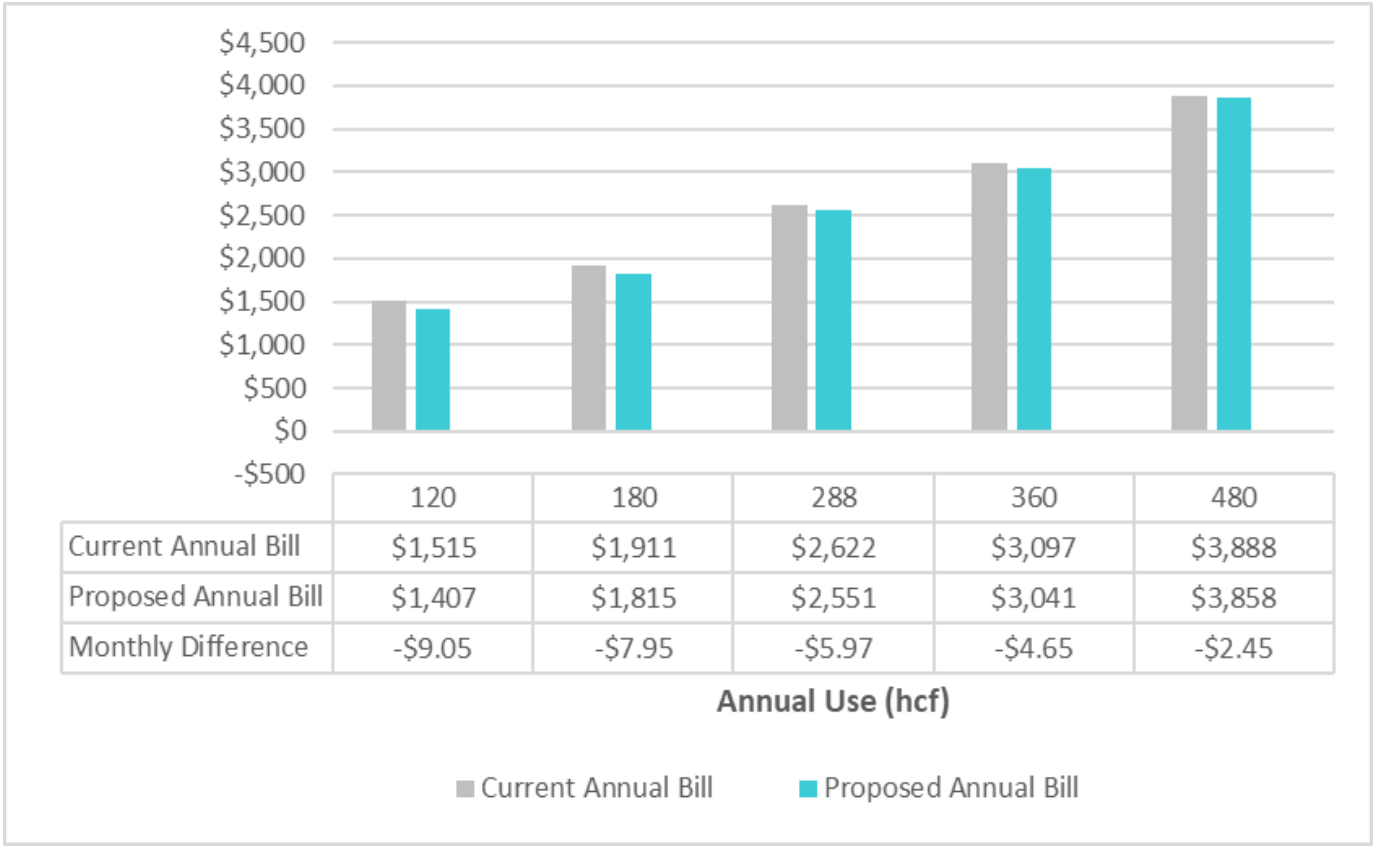
Customer Class	Current	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Single Family Residential						
4S, SL	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
RC	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Other						
Multi-Family	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group I	$6.59	$6.81	$7.02	$7.24	$7.46	$7.69
Commercial - Group II	$10.16	$9.43	$9.72	$10.02	$10.33	$10.64

SINGLE FAMILY CUSTOMER IMPACTS



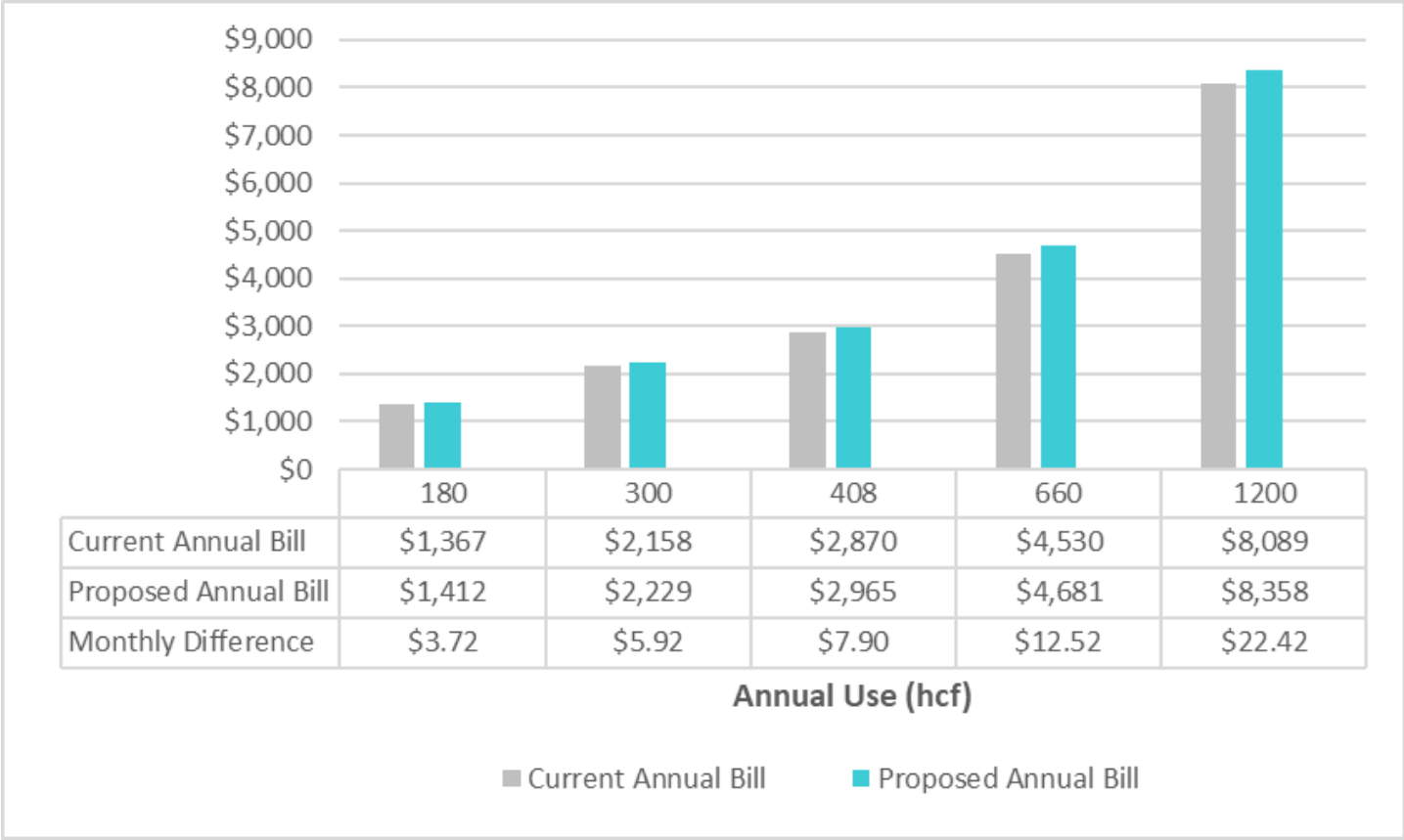
	24	48	84	96	120
Current Annual Bill	$339	$497	$735	$814	$972
Proposed Annual Bill	$350	$513	$758	$840	$1,003
Monthly Difference	$0.86	$1.30	$1.96	$2.18	$2.62

MULTI-FAMILY CUSTOMER IMPACTS



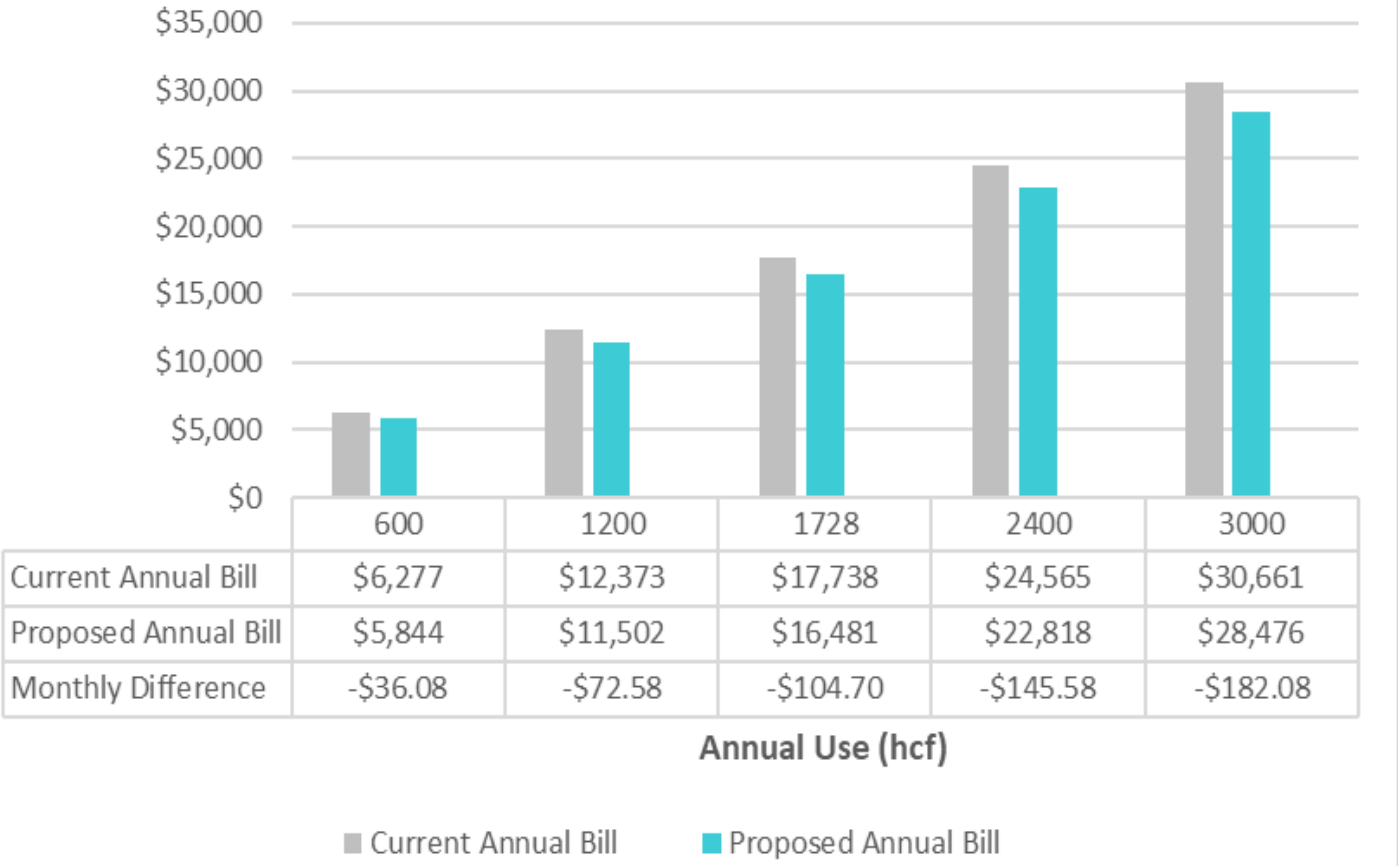
	120	180	288	360	480
Current Annual Bill	$1,515	$1,911	$2,622	$3,097	$3,888
Proposed Annual Bill	$1,407	$1,815	$2,551	$3,041	$3,858
Monthly Difference	-$9.05	-$7.95	-$5.97	-$4.65	-$2.45

GROUP I CUSTOMER IMPACTS



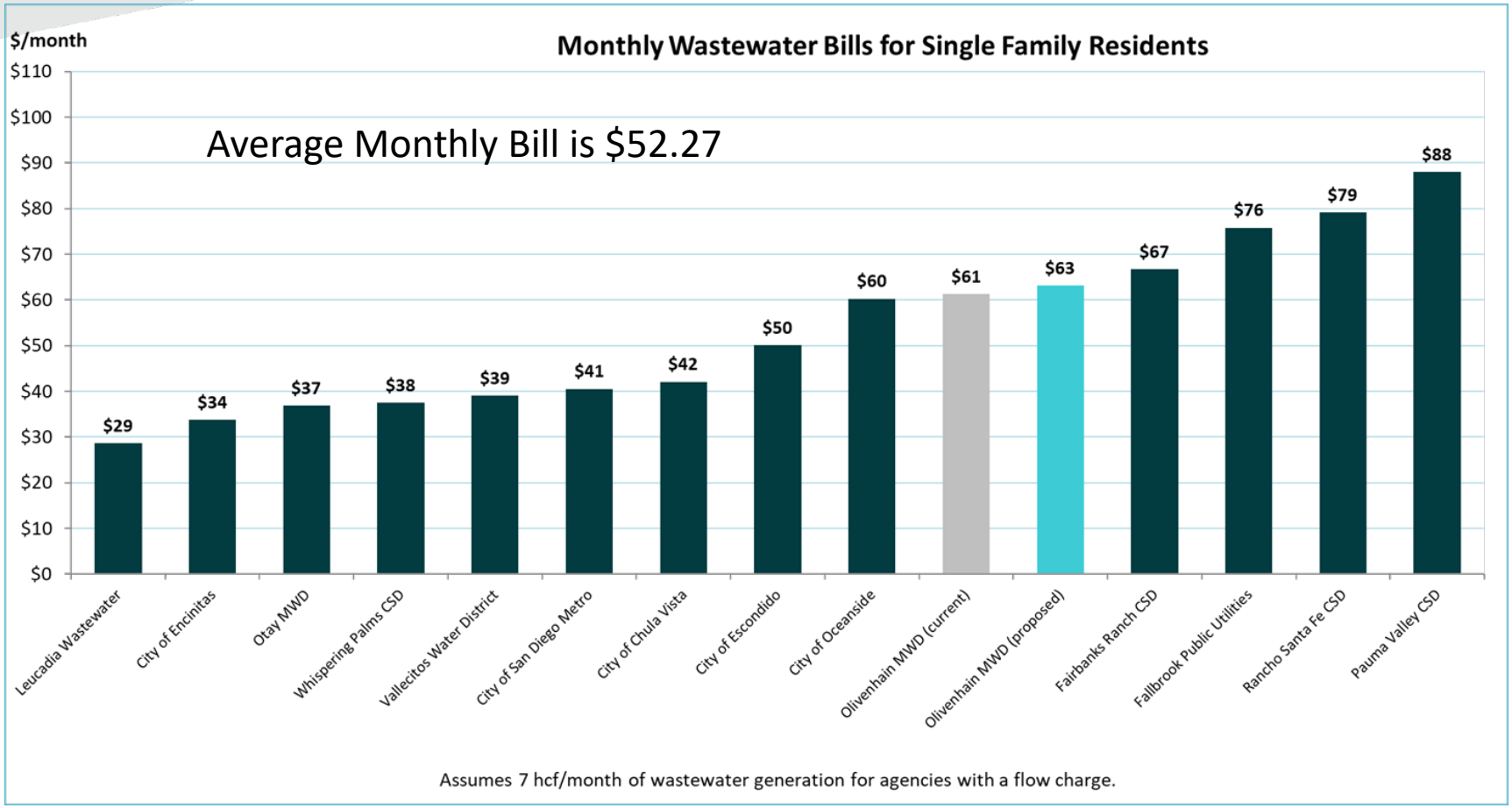
	180	300	408	660	1200
Current Annual Bill	$1,367	$2,158	$2,870	$4,530	$8,089
Proposed Annual Bill	$1,412	$2,229	$2,965	$4,681	$8,358
Monthly Difference	$3.72	$5.92	$7.90	$12.52	$22.42

GROUP II CUSTOMER IMPACTS



	600	1200	1728	2400	3000
Current Annual Bill	$6,277	$12,373	$17,738	$24,565	$30,661
Proposed Annual Bill	$5,844	$11,502	$16,481	$22,818	$28,476
Monthly Difference	-$36.08	-$72.58	-$104.70	-$145.58	-$182.08

Sewer Bill Comparison



NEXT STEPS

- Finalize wastewater rates
  - Board direction on preferred rate option
- Issue Proposition 218 notices
- Conduct Proposition 218 hearing

Questions & Discussion

Thank you!

Contact:
Sudhir Pardiwala – P: 626.583.1894 / E: spardiwala@raftelis.com

Arisha Ashraf – P: 909.231.4645 / E: aashraf@raftelis.com

OLIVENHAIN
Municipal Water District

Agenda Item 7

Memo

Date: February 2, 2022

To: Finance Committee

From: Rainy Selamat, Finance Manager

Via: Kimberly Thorner, General Manager

Subject: QUARTERLY REVIEW OF INVESTMENTS AND FUND BALANCES (Q4 2020)

Purpose

The purpose of this agenda is to provide fourth quarter (Q4) 2020 investment and cash information to the Finance Committee per the District's Investment Policy.

Recommendation

It is recommended that the Committee review and receive the attached report as presented.

Background

The attached reports are presented to provide information to the Finance Committee as required by the District's Annual Investment Policy, which was adopted by the Board at the December 2020 board meeting.

The purpose of the District's Investment Policy is to identify policies and procedures that shall govern the investment of all District funds. The ultimate goal of the policy is to enhance the economic position of the District while protecting its funds. These policies have been followed in making all investment decisions on behalf of the District.

The Annual Investment Policy also states that at least once each quarter, the District's Finance Manager shall provide an oral report on the District's investments for review and discussion.

Discussion

Staff will be available for discussion with the Committee during the meeting.

Attachment: Monthly Cash and Investment Summary as of December 31, 2020

Olivenhain Municipal Water District
MONTHLY CASH AND INVESTMENT SUMMARY
As of December 31, 2020

Active Deposits	**Book Value**
Checking Accounts	$ 14,348,114
Cash Restricted for Specific Use	493,178
Petty Cash/Disaster Preparedness	1,468
Total Active Deposits	$ 14,842,759

Deposits Not Covered by Investment Policy	
Cash with Fiscal Agents	2,239,697

Investments	**Face Value**	**Market Value**	**Current Yield**	
LAIF	$ 25,079,261	25,202,470	0.54%	$ 25,079,261
CAMP	12,828,954	12,828,954	0.12%	12,828,954
Money Market Funds	1,097,690	1,097,690	0.01%	1,097,690
Municipal Bonds	3,371,071	3,596,773	3.00%	3,619,714
U.S. Agency Securities	20,545,000	20,537,545	0.90%	20,545,000
Total Investments	$ 62,921,976	$ 63,263,432	0.70%	$ 63,170,619

Total - All Deposits/Investments	**$ 80,253,075**

Maturity Analysis of Investments	**Percent**	**Balance**
Demand Deposits	61.7%	$ 39,005,905
Maturity within the next two months	0.0%	-
Maturity within three months and one year	3.8%	2,402,954
Maturity beyond one year	34.4%	21,761,760
Total Investments	**100.0%**	**$ 63,170,619**

Weighted Average Days to Maturity	**419**

Other Required Disclosures:

Accrued interest receivable as of 12/31/2020 $ 128,897

The above investments are in accordance with the portfolio limitations in the Investment Policy approved by the Board in December 2020.

The District has sufficient funds on hand to meet the next 30 days' obligations.

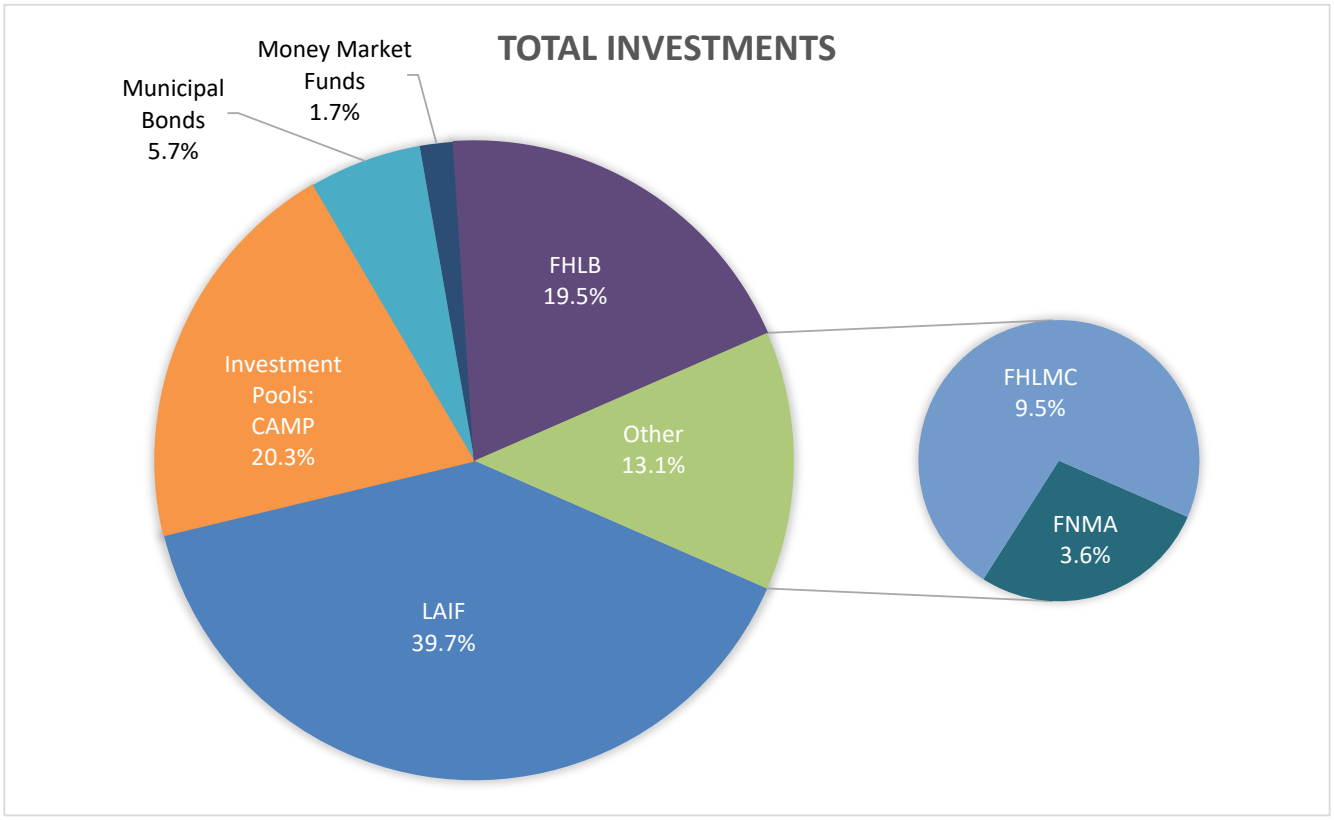
Olivenhain Municipal Water District
PORTFOLIO LIMITATIONS ANALYSIS PER INVESTMENT POLICY
December 31, 2020

		Book Value	Percent	Permitted Percent		In Compliance?
LAIF		$ 25,079,261	39.7%	40.0%	(1)	Yes
Investment Pools: CAMP		12,828,954	20.3%	30.0%		Yes
Municipal Bonds		3,619,714	5.7%	30.0%		Yes
Money Market Funds		1,097,690	1.7%	20.0%	(2)	Yes
U.S. Agency Securities		8,250,000	32.6%	50.0%		Yes
FHLB	*Federal Home Loan Bank*	*12,295,000*	*19.5%*			
FNMA	*Fannie Mae*	*2,250,000*	*3.6%*			
FHLMC	*Freddie Mac*	*6,000,000*	*9.5%*			
Total Investments		**$ 63,170,619**	**100%**			

Note:

(1) New limit of 40% approved by the board in May 2020.

(2) May not exceed 5% in any money market fund.



* Total may not add up to 100% due to rounding.

Olivenhain Municipal Water District
MONTHLY INVESTMENTS DETAIL
December 31, 2020

ACTIVE DEPOSIT		Book Value
Checking A/C	California Bank and Trust for General Purpose	14,348,114
	California Bank and Trust for Specific Purpose	493,178
Petty Cash/Disaster Preparedness		1,468
	Total - Active Deposits	**14,842,759**

DEPOSITS NOT COVERED BY INVESTMENT POLICY	
Cash with Fiscal Agents:	
Union Bank - AD 96-1 Refunding Bond	126,054
Union Bank - 2015A Refunding Bond	847,905
SRF Loan	750,338
Union Bank - 2016A Refunding Bond	256,999
Union Bank - 2018 Revenue Bond	258,401
Total Deposits Not Covered by Investment Policy	**2,239,697**

		RATING		DATE				Weighted Average Days to		*Stated*	*Current*			
		Moody's	S&P	Purchase	Maturity	Next Call	Next S-U	Maturity	Call	*Coupon*	*Yield*	Market Value	Face Value	Book Value
INVESTMENTS														
Invest. Pools:	Calif. Asset Mgmt Prgm (CAMP)				Demand			1			*0.12%*	$ 12,828,954	$ 12,828,954	12,828,954
State Local Agency Investment Fund (LAIF)					Demand			1			*0.54%*	25,202,470	25,079,261	25,079,261
JP Morgan US Gov't Money Market Fund Premier Class SHS					Demand			1			*0.01%*	1,097,690	1,097,690	$ 1,097,690
U.S. Agency Securities														
3130AHV75	FHLB Callable	Aaa	AA+	01/13/20	01/13/23	01/13/21		744	14	*1.70%*	*1.70%*	1,000,380	1,000,000	1,000,000
3134GU3H1	FHLMC Callable	Aaa	AA+	01/27/20	01/27/23	01/27/21		758	28	*1.67%*	*1.67%*	1,000,920	1,000,000	1,000,000
3130AJ3M9	FHLB Callable	Aaa	AA+	02/18/20	08/18/23	02/18/21		961	50	*1.63%*	*1.62%*	2,003,460	2,000,000	2,000,000
3130AHV83	FHLB Callable	Aaa	AA+	01/22/20	01/22/24	01/22/21		1,118	23	*1.78%*	*1.78%*	2,001,100	2,000,000	2,000,000
3130AHY56	FHLB Callable	Aaa	AA+	01/29/20	01/29/25	01/29/21		1,491	30	*1.87%*	*1.87%*	2,001,800	2,000,000	2,000,000
3134GWAQ9	FHLMC Callable	Aaa	AA+	07/28/20	07/28/25	07/28/21		1,671	210	*0.65%*	*0.65%*	995,930	1,000,000	1,000,000
3136G4A29	FNMA Callable	Aaa	AA+	07/30/20	07/30/24	07/30/21		1,308	212	*0.55%*	*0.55%*	998,680	1,000,000	1,000,000
3134GWGL4	FHLMC Callable	Aaa	AA+	08/03/20	02/03/23	02/03/21		765	35	*0.33%*	*0.33%*	1,998,100	2,000,000	2,000,000
3134GW2F2	FHLMC Callable	Aaa	AA+	08/25/20	05/25/23	08/25/21		876	238	*0.30%*	*0.30%*	1,999,300	2,000,000	2,000,000
3136G4P56	FNMA Callable	Aaa	AA+	08/26/20	02/26/24	08/26/22		1,153	604	*0.40%*	*0.40%*	1,247,700	1,250,000	1,250,000
3130AJZJ1	FHLB Callable	Aaa	AA+	09/02/20	08/25/23	02/25/21		968	57	*0.32%*	*0.32%*	1,294,055	1,295,000	1,295,000
3130AKEW2	FHLB Callable	Aaa	AA+	11/04/20	11/04/24	05/04/21		1,405	125	*0.43%*	*0.43%*	1,995,860	2,000,000	2,000,000
3130AKGX8	FHLB Callable	Aaa	AA+	12/15/20	12/15/25	06/15/21		1,811	167	*0.20%*	*0.20%*	2,000,260	2,000,000	2,000,000
								1,170	**329**	***0.90%***	***0.90%***	**$ 20,537,545**	**$ 20,545,000**	**$ 20,545,000**
Municipal Bonds														
13063DAC2	CALIFORNIA ST GO	AA3	AA-	04/09/18	04/01/21			92		*2.63%*	*2.61%*	1,005,790	1,000,000	999,620
13066YTY5	CALIF ST DEPT REV	AA1	AA	12/02/16	05/01/21			122		*1.71%*	*1.70%*	372,863	371,071	366,874
052476N79	AUSTIN TEX WTR REV	AA2	AA	11/15/16	05/15/21			136		*2.54%*	*2.52%*	1,008,080	1,000,000	1,036,460
882724RA7	TEXAS ST PUB FIN AUTH	Aaa	AAA	10/30/20	10/01/25			1,736		*5.00%*	*4.13%*	1,210,040	1,000,000	1,216,760
								660		***3.21%***	***3.00%***	**$ 3,596,773**	**$ 3,371,071**	**$ 3,619,714**
	Total Investments							**419**		***0.71%***	***0.70%***	**$ 63,263,432**	**$ 62,921,976**	**$ 63,170,619**

TOTAL - ALL DEPOSITS AND INVESTMENTS	80,253,075

Olivenhain Municipal Water District
INVESTMENTS TRANSACTION
December 31, 2020

PURCHASED

DATE								
Purchase	Maturity	Call	Step-Up	Investment Description	*Stated Coupon*	*Current Yield*	Face Value	Book Value
12/15/20	12/15/25	06/15/21		FHLB Callable	*0.200%*	*0.200%*	2,000,000	2,000,000

MATURED / REDEEMED / CALLED

DATE								
Redemption	Maturity	Call	Step-Up	Investment Description	*Stated Coupon*	*Current Yield*	Face Value	Book Value
12/31/20	12/31/20			U.S.Treasury Notes	*2.375%*	*2.371%*	1,000,000	998,196

Olivenhain Municipal Water District
UNAUDITED CASH POSITION BY FUNDING SOURCES
As of December 31, 2020

Water Funds (Potable & Recycled)			**Balance**
10050-100	Cash - Petty Cash Fund	$	1,468
10030-100	Cash - Capital and Equipment Fund		33,972,554
10010-100	Cash - Operating Fund		16,651,583
10060-100	Cash - Deposit Work for Other		523,547
10040-100	Cash - Rate Stabilization		8,436,943
14000-500	Restricted Cash - Capacity Fee Fund		4,983,279
	Total Water Funds (Potable & Recycled)	**$**	**64,569,373**
Wastewater Funds			
10010-110	4S Ranch Sanitation District - Operating Fund		1,406,357
10030-110	4S Ranch Sanitation District - Capital Replacement Fund		8,720,831
10040-110	Wastewater - Rate Stabilization Fund		2,596,874
10010-111	Rancho Cielo Sanitation District - Operating Fund		226,767
	Total Wastewater Funds	**$**	**12,950,828**
Non Fiscal Agent Debt Service Cash			
14020-570	Cash non-agent - RAD 96-1		480,141
10070-561	Cash non-agent - Bond 2015A		621
10070-581	Cash non-agent - Bond 2016A		10,580
14020-512	Cash non-agent - Bond 2018		1,836
	Total Non Fiscal Agent Debt Service Cash	**$**	**493,178**
Debt Service Funds			
14030-510	SRF Loan - Fiscal Agent		750,338
14105-570	Redemption fund - RAD 96-1		40,787
14110-570	Reserve fund - RAD 96-1		85,267
14100-561	Redemption fund - Bond 2015A		847,905
14100-581	Redemption fund - Bond 2016A		256,999
14100-512	Redemption fund - CB&T 2018		258,401
	Total Debt Service Funds	**$**	**2,239,697**
TOTAL FUND BALANCES		**$**	**80,253,075**